TETRA TECH

December 27, 2017

Mr. John Frey
On-Scene Coordinator
U.S. Environmental Protection Agency – TLC
8600 NE Underground Drive, Pillar 253
Kansas City, Missouri 64161

Subject: **Preliminary Assessment Report**
26th and Bayard Avenue Site, Kansas City, Wyandotte County, Kansas
U.S. EPA Region 7, START 4, Contract No. EP-S7-13-06, Task Order No. 0107.002
Task Monitor: John Frey, EPA On-Scene Coordinator

Dear Mr. Frey:

Tetra Tech, Inc. is submitting the enclosed Preliminary Assessment report regarding the above-referenced facility. If you have any questions or comments regarding this submittal, please contact the Project Manager at (816) 412-1772.

Sincerely,

John R. Simpson, CHMM
START Project Manager

Ted Faile, PG, CHMM
START Program Manager

Enclosures

cc: Debra Dorsey, START Project Officer (cover letter only)

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PRELIMINARY ASSESSMENT
AT THE
26TH AND BAYARD AVENUE SITE
KANSAS CITY, KANSAS

Superfund Technical Assessment and Response Team (START) 4 Contract
Contract No. EP-S7-13-06, Task Order 0107.002

Prepared For:

U.S. Environmental Protection Agency
Region 7
Superfund Division
11201 Renner Boulevard
Lenexa, Kansas 66219

December 27, 2017

Prepared By:

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1.0 INTRODUCTION

The U.S. Environmental Protection Agency (EPA), Region 7, under authority of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) and the Superfund Amendments and Reauthorization Act of 1986 (SARA), tasked Tetra Tech, Inc. (Tetra Tech) to conduct a preliminary assessment (PA) of the 26th and Bayard Avenue site (the site) in Kansas City, Kansas, under Superfund Technical Assessment and Response Team (START) 4 Contract Number EP-S7-13-06, Task Order 0107.002.

Purposes of this PA were to (1) review existing information regarding the site and its environs in order to assess the threat(s), if any, posed to public health, welfare, or the environment; and (2) identify data gaps and determine if further investigation under CERCLA is warranted. The scope of this PA includes review of available information, sampling of environmental media, and development of a report that summarizes findings.

By use of existing information and sampling data, the facility can be evaluated according to the EPA Hazard Ranking System (HRS) criteria to assess the relative threat associated with actual or potential releases of hazardous substances at the site. The HRS has been adopted by EPA to help set priorities for further evaluation and eventual remedial action at hazardous waste sites. The HRS is the primary method of determining a site's eligibility for placement on the National Priorities List (NPL). The NPL identifies facilities at which the EPA may conduct remedial response actions. This report summarizes findings of these preliminary investigative activities.

Apparent Problem

In 1981, several VOCs were detected in an industrial supply well used by Procter and Gamble (Well #11), including vinyl chloride; 1,1-dichloroethene (DCE); 1,2-DCE; 1,1-dichloroethane (DCA); 1,2-DCA; and benzene. Proctor and Gamble's Well #11 and Well # 12 were removed from service in 1991, and both were plugged in 2005. These wells were industrial water supply wells, not used for drinking water purposes. The wells were located along the Kansas River Levee, on the south side of Kansas Avenue, south of the Proctor and Gamble plant. Several investigations by the Kansas Department of Health and Environment (KDHE) in 2007 and 2010 identified detectable concentrations of VOCs in groundwater in the vicinity the former Proctor and Gamble Well #11 and in the area of 26th Street and Bayard Avenue (KDHE 2010). No documentation of a specific release or indication of a likely source of contamination was identified. KDHE recommended further sampling and referred the site to EPA for evaluation.

This PA was conducted to assess potential for threat to human health and environment from contamination of soil, groundwater, and vapor intrusion associated with the contamination described above.

2.0 SITE INFORMATION

The site's location, description, and operational history are discussed below, as well as previous investigations of the site.

2.1 SITE LOCATION/DESCRIPTION

The site is near the intersection of South 26th Street and Bayard Avenue in the Armourdale area of Kansas City, Kansas 66105 (Appendix A, Figure 1). The site includes commercial and industrial properties along Bayard Avenue between 18th Street Expressway and South 26th Street. Major industrial facilities in the area include the Procter and Gamble plant to the south and a Union Pacific Railroad rail yard to the north. The site is within Section 17, Township 11 South, Range 25 East in Wyandotte County, Kansas (USGS 2015). Global positioning system (GPS) coordinates at the site are 39.09125 north latitude and 94.65569 west longitude. The site is within a heavy industrial area of Kansas City, Kansas.

2.2 GEOLOGY AND HYDROGEOLOGY

Eudora silt loam is the surface soil at the 26th and Bayard site, and lies atop 70-80 feet of alluvial deposits (U.S. Department of Agriculture [USDA] 2017). Underlying these deposits is Pennsylvanian-age limestone and shale (Kansas Geological Survey [KGS] 2006).

Three significant groundwater sources are in Wyandotte County: alluvial aquifers, bedrock aquifers, and buried valleys. In parts of eastern Kansas, alluvial aquifers are the only significant sources of groundwater. The Kansas River valley contains a very productive alluvial aquifer extending from Junction City to Kansas City. Groundwater is typically encountered at approximately 30-40 feet below ground surface (bgs) (KDHE 2010). Groundwater flow direction in the area is greatly influenced by the Kansas River, less than 0.5 mile southwest of the site. Groundwater flow direction in the area is generally presumed southwest toward the Kansas River. Pumping of industrial wells in the area may also influence groundwater flow direction (KDHE 2007).

2.3 PREVIOUS INVESTIGATIONS

In 1990, KDHE conducted a Preliminary Assessment (PA) at the Procter and Gamble Well #11 site (KDHE Site I.D. C4-105-00348; EPA I.D. KSD007130032). 1,1-DCE, trichloroethene (TCE), and vinyl chloride were detected at elevated concentrations. The commercial herbicide bromacil was also detected at trace concentrations. KDHE conducted a Screening Site Inspection (SSI) in 1991 that included collection of additional groundwater samples and a soil-gas survey. 1,1-DCE, 1,2-DCA, TCE, and vinyl chloride were detected in groundwater at concentrations above EPA Maximum Contaminant Levels

(MCL). In addition to the Procter and Gamble wells, the nearby Colgate-Palmolive wells were also sampled. The Colgate-Palmolive site was later accepted into KDHE's Voluntary Cleanup Program; contaminants detected there differed from those detected at the 26th and Bayard Avenue site. The SSI did not conclusively identify any likely source area of contaminants identified in the Procter and Gamble Well #11 (KDHE 2007).

In 2007, KDHE conducted a Supplemental Sampling Assessment (SSA) at the Procter and Gamble Well #11 site. Groundwater was sampled at six locations within three intervals. Five of these sampling locations occurred along Bayard Avenue upgradient of the Procter and Gamble facility (Probes 1-5). One additional sample (Probe 6) was collected near the former location of Well #11. 1,1-DCE was detected at maximum level of 220 micrograms per liter (µg/L)—above its MCL of 7 µg/L—in Probe 6 (near the former Well #11 location) within the deepest interval. Vinyl chloride was detected at maximum concentration of 12 µg/L—above its MCL of 2 µg/L—at the same sampling location and within the same interval. The SSA report concluded a release had occurred upgradient of the former Procter and Gamble facility, and recommended further sampling to verify that (KDHE 2007).

In 2009, KDHE performed a Site Evaluation (SE) of the 26th and Bayard Avenue site. Groundwater samples were collected at nine boring locations within three discrete depth intervals. Groundwater samples from seven of the nine boring locations contained 1,1-DCE and/or vinyl chloride at concentrations exceeding the respective MCLs. KDHE recommended further sampling and referred the site to EPA for evaluation (KDHE 2010).

2.4 WASTE CHARACTERISTICS

This section discusses waste characteristics of known contaminants at the site.

2.4.1 Trichloroethene (TCE)

TCE is a nonflammable, colorless liquid with a somewhat sweet odor and a sweet, burning taste. It is used mainly as a solvent to remove grease from metal parts, but it is also an ingredient in adhesives, paint removers, typewriter correction fluids, and spot removers. TCE is not thought to occur naturally in the environment. However, it has been found in underground water sources and many surface waters as a result of manufacture, use, and disposal of the chemical (ATSDR 2017).

2.4.2 1,2-Dichloroethene (1,2-DCE)

1,2-DCE, also called 1,2-dichloroethylene, is a highly flammable, colorless liquid with a sharp, harsh odor. It is used to produce solvents and in chemical mixtures. Very small amounts of 1,2-DCE in air

(about 17 parts of 1,2-DCE per million parts of air [17 ppm]) are detectable by odor. Two forms of 1,2-DCE are *cis*-1,2-DCE and *trans*-1,2-DCE. Sometimes both forms are present as a mixture (ATSDR 2017).

2.4.3 1,1- Dichloroethene (1,1-DCE)

1,1-DCE is an industrial chemical not found naturally in the environment. It is a colorless liquid with a mild, sweet smell. It is also called vinylidene chloride. 1,1-DCE is used to make certain plastics, such as flexible films like food wrap, and in packaging materials. It is also used to make flame retardant coatings for fiber and carpet backings, and in piping, coating for steel pipes, and in adhesive applications (Agency for Toxic Substances and Disease Registry [ATSDR] 2017). TCE in the environment is broken down by anaerobic bacteria through the process of reductive dechlorination. The resulting byproducts of reductive dechlorination of TCE are dichloroethene and vinyl chloride.

2.4.4 Vinyl Chloride

Vinyl chloride is a colorless gas at room temperature. Vinyl chloride exists in liquid form if kept under high pressure or at low temperatures. It burns easily and it is not stable at high temperatures. It has a mild, sweet odor. It is a manufactured substance that does not occur naturally. It can be formed when other substances such as TCE and tetrachloroethene (PCE) are broken down. Vinyl chloride is used to make polyvinyl chloride (PVC). PVC is used to make a variety of plastic products, including pipes, wire, and cable coatings, and packaging materials. Vinyl chloride is also known as chloroethene, chloroethylene, and ethylene monochloride (ATSDR 2017).

3.0 PRELIMINARY ASSESSMENT ACTIVITIES

This section discusses preliminary assessment activities at the 26th and Bayard Avenue site on August 8-9, 2017. Unless otherwise noted in this report, sampling and analytical procedures followed standard operating procedures (SOP) specified in the approved, site-specific Quality Assurance Project Plan (QAPP) (Tetra Tech 2017). Sample locations were selected based on site knowledge and previous investigation results. Except for soil gas samples, a field sheet was completed for each sample collected as part of the PA. Copies of all field sheets are in Appendix B. The field sheets include the following information: location description, depth, collection date and time, and analyses to be performed. After sample collection, each sample was labeled and packaged accordingly, and placed in a cooler maintained at or below a temperature of 4 degrees Celsius (°C) from time of collection until submittal for laboratory analysis.

3.1 DIRECT-PUSH TECHNOLOGY GROUNDWATER SAMPLING

To assess the groundwater exposure pathway, groundwater samples were collected from temporary wells advanced by use of a direct-push technology (DPT) boring machine at 10 locations on August 8-9, 2017 (Appendix A, Figure 2). At each temporary well location, a Geoprobe® Screen Point 16 sampling apparatus containing a reusable stainless steel screen was advanced to refusal (typically 70 to 74 feet bgs), where the screen was exposed to the aquifer. After the screen was deployed at the bottom of the well and about 1 gallon of water was purged through the screen and tubing, a sample was collected through disposable polyethylene tubing by use of a check valve placed at the bottom of the tubing. Groundwater samples were collected within three separate depth intervals in each boring (typically 70-74, 55-59, and 40-44 feet bgs). Groundwater samples were collected for VOCs analysis in three 40-milliliter (mL) vials preserved with hydrochloric acid (HCl). After completion of sampling activities, all temporary wells were plugged with bentonite from bottom of hole to ground surface. Any disturbance to surface materials was patched with appropriate material.

3.2 DIRECT-PUSH TECHNOLOGY SUB-SURFACE SOIL SAMPLING

To assess the soil exposure pathway, soil borings were advanced and sampled at three locations on August 8-9, 2017 (Appendix A, Figure 2). By use of DPT, a soil sampler was advanced at each location. Soil cores were screened by use of a photoionization detector (PID) for presence of VOCs. No elevated PID readings and/or visual staining was evident during sampling in two of the three soil cores; therefore, samples were collected just above the water table at 26 feet and 32 feet bgs. At soil probe location B-9, some degree of visual staining or soil discoloration was noted, and a sample collected at approximately 9 feet bgs.

Each soil sample collected for VOC analysis consisted of two 40-mL vials preserved with sodium bisulfate containing approximately 5 grams of soil, one 40-mL vial preserved with methanol containing approximately 5 grams of soil, and one unpreserved 40-mL vial packed with soil. Each soil sample was collected in accordance with EPA SW-846 Method 5035. After completion of sampling activities, all DPT boreholes were plugged with bentonite from bottom of hole to ground surface. Any disturbance to surface materials was patched with appropriate material.

3.3 SOIL GAS SAMPLING

To assess the possible vapor intrusion pathway, soil gas was sampled at nine of the 10 DPT boring locations on August 7, 2017 (Appendix A, Figure 2). No soil gas sample could be collected at the location of boring B-3 due to subsurface obstructions. At each location, a hammer drill was used to advance a 0.5-inch-diameter soil probe rod with an expendable tip to approximately 7 feet bgs. Upon reaching maximum depth, the probe was extracted about 6 inches, leaving the expendable tip at the bottom of the hole and exposing soil to the probe. Two probe volumes of soil gas were then purged, and the sampling train was connected when the vacuum in the port returned to atmospheric pressure.

The vapor grab samples were collected in 1-liter Tedlar bags by use of a vacuum pump. Flow rates were maintained at less than or equal to 200 milliliters per minute to ensure that the vacuum on the port was not high enough to draw ambient air from above ground. Samples were analyzed for VOCs by EPA Region 7's mobile laboratory in accordance with SOP 2318.05.

3.4 QUALITY CONTROL SAMPLING

Field quality control (QC) sampling for this PA included one laboratory-supplied aqueous trip blank sample, one field blank sample, and one equipment rinsate blank sample. Analytical data from the trip blanks were referenced to determine whether contamination had been introduced during transportation of the containers and samples. The field blank sample was analyzed to determine if other environmental contamination was present during sample collection. The equipment rinsate blank sample was collected through a Geoprobe® groundwater sampler and analyzed to determine adequacy of decontamination procedures.

3.5 DEVIATIONS FROM THE QAPP

The following deviations from the QAPP occurred during field sampling:

- Soil samples were collected only from three soil boring locations rather than 10.
- No sub-slab soil gas samples or indoor air samples were collected.
- Soil gas samples were collected only at nine locations, rather than 10.

4.0 ANALYTICAL DATA SUMMARY

This section discusses analytical results from environmental samples collected during PA fieldwork activities at the site.

4.1 DIRECT-PUSH TECHNOLOGY GROUNDWATER SAMPLES

On August 8-9, 2017, 30 groundwater samples were collected from 10 DPT temporary wells at the site. Samples were submitted on August 10, 2017, to the EPA Region 7 laboratory for VOC analysis as part of Analytical Services Request (ASR) 7553.

Laboratory analytical data indicate that one or more VOCs were detected in all samples collected. VOCs detected included acetone, carbon disulfide, chlorobenzene, 1,1-DCE, *cis*-1,2-DCE, *trans*-1,2-DCE, ethylbenzene, toluene, TCE, and vinyl chloride. Several detected concentrations of TCE and vinyl chloride exceeded EPA Superfund Chemical Data Matrix (SCDM) benchmarks for the groundwater pathway—cancer risk levels of 1.1 and 0.021 µg/L, respectively. However, none of the TCE or vinyl chloride detections exceeded the EPA MCLs of 5 µg/L and 2 µg/L, respectively. Several detections of 1,1-DCE exceeded the EPA Maximum Contaminant Level (MCL) of 7 µg/L; however, the SCDM benchmark for the groundwater pathway—non-cancer risk level of 1,000 µg/L—was not exceeded in any of the samples. Detected concentrations of 1,1-DCE, TCE, and vinyl chloride are indicated on Figure 3 in Appendix A. Analytical results are summarized in Appendix C, Table 1, and analytical data are included in Appendix D.

VOC detections in the shallowest groundwater samples were evaluated by use of the EPA Vapor Intrusion Screening Level (VISL) Calculator to identify potential indoor air exposure concerns. Highest concentrations of 1,1-DCE, TCE, and vinyl chloride reported from the shallow groundwater samples were used to calculate potential indoor air concentrations. Calculated potential indoor air concentrations of 1,1-DCE, TCE, and vinyl chloride were 26.7, 0.383, and 1.59 micrograms per cubic meter (µg/m^3), respectively—below the EPA VISL target indoor air concentrations for commercial property of 88, 0.88, and 2.8 µg/m^3, respectively (target carcinogen risk [TCR] $1x10^{-6}$ or target hazard quotient [THQ] for non-carcinogens of 0.1).

4.2 DIRECT-PUSH TECHNOLOGY SUBSURFACE SOIL SAMPLES

On August 8-9, 2017, three subsurface soil samples were collected from three DPT borings at the site (Appendix A, Figure 2). Samples were submitted on August 10, 2017, to the EPA Region 7 laboratory for VOC analysis as part of ASR 7533.

Laboratory analytical results indicated detections of acetone in two of the three samples and detection of 1,1-DCE in one sample. All reported detected concentrations were below respective EPA Regional Screening Levels (RSL) for industrial soil and EPA SCDM benchmarks for soil exposure. Analytical results are summarized in Appendix C, Table 2, and analytical data are in Appendix D.

4.3 SOIL GAS SAMPLES

On August 7, 2017, 10 soil gas samples were collected at nine boring locations at the site. Samples were submitted on August 8, 2017, to the EPA Region 7 mobile laboratory for VOC analysis.

Results of mobile laboratory analysis indicated detections of PCE and/or TCE in samples from four of the nine sample locations. PCE concentrations ranged from 3.83 to 16.23 µg/m^3. One of the detections PCE in soil gas samples exceeded the EPA SCDM benchmark for subsurface intrusion (cancer risk of 10 µg/m^3). None of the PCE detections exceeded the EPA VISL for Target Sub-Slab and Exterior Soil Gas (TCR = 10^{-6}, THQ = 0.1) of 140 µg/m^3. TCE was detected in one soil gas sample (B-10) at 4,626.59 µg/m^3, which exceeded the EPA VISL of 7 µg/m^3. TCE was not detected in any other soil gas samples analyzed, and TCE was not detected in any of the three groundwater samples collected at the location of boring B-10. Therefore, the TCE detection in soil gas sample B-10 is suspected to be a result of laboratory contamination or interference, and not representative of site conditions. Results of soil gas sampling are summarized in Appendix C, Table 3.

4.4 QUALITY CONTROL SAMPLES

One equipment rinsate blank, one field blank, and one trip blank were collected as a part of groundwater sampling quality assurance (QA)/QC sampling during PA environmental sampling at the site. Samples were submitted to EPA Region 7 laboratory for VOC analysis as part of ASR 7533. The complete laboratory data package is in Appendix D.

Analytical results from the blank samples indicated only trace amounts of the VOC chloroform. Chloroform is a common byproduct of drinking water disinfection. Detections in the blank samples can be attributed to the tap water provided by the laboratory for blank preparation. No other detection of a VOC in QA/QC samples occurred.

5.0 HAZARD RANKING SYSTEM FACTORS

This section discusses sources of contamination and various contaminant migration pathways evaluated under the HRS.

5.1 SOURCES OF CONTAMINATION

START collected soil and groundwater samples for VOC analysis in the area of the site. Several VOCs were detected in soil and groundwater samples. The most significant contaminants of concern detected during PA sampling were 1,1-DCE, TCE, and vinyl chloride. TCE and vinyl chloride were detected only in groundwater samples.

Highest detected concentrations of 1,1-DCE in groundwater occurred in samples from boring locations B-7, B-8, and B-9. Highest detected concentrations of TCE in groundwater occurred in samples from borings B-1, B-2, and B-8. Highest detected concentrations of vinyl chloride in groundwater occurred in samples from borings B-7 and B-8.

No documented releases to soil or groundwater have occurred in the area. While soil and groundwater analytical data indicate presence of contamination, contaminant detections exhibit no identifiable pattern. The source of the identified 1,1-DCE, TCE, and vinyl chloride contamination to soil and groundwater in the area is unknown.

5.2 GROUNDWATER PATHWAY

This section discusses groundwater targets and pathway conclusions drawn from analytical results from groundwater sampling at the site. During this PA, groundwater samples were collected from 10 DPT temporary wells (see Appendix A, Figure 2).

5.2.1 Groundwater Targets

The groundwater exposure pathway is evaluated by determining proximities of and likelihood of impact on domestic water wells in the area. According to KGS water well records, the domestic water well nearest to the site is approximately 0.75 mile northeast and presumed hydraulically upgradient of the site (KGS 2017). No records were found of active domestic water wells downgradient of the site between the site and the Kansas River (approximately 0.25 mile southwest of the site). However, based on data obtained during this PA, boundaries of the contaminated groundwater plume have not been defined.

5.2.2 Groundwater Pathway Conclusions

Because extent of the contaminated groundwater plume has not been defined, exposure via domestic water wells is possible.

5.3 SOIL EXPOSURE PATHWAY

This section discusses soil exposure targets and pathway conclusions drawn from analytical results from soil sampling at the site. During this PA, subsurface soil samples were collected from three soil borings (see Appendix A, Figure 2). No soil samples were collected from less than 2 feet bgs as part of this investigation. The area of the 26th and Bayard Avenue site is primarily paved or covered by commercial and industrial buildings. The nearest residential properties are approximately ½-mile north or east of the site.

5.3.1 Soil Exposure Pathway Targets

The soil exposure pathway would pose risk from contamination within areas where people live or work. The only documented soil contamination is present in subsurface soil. Therefore, the only potential targets appear to be construction workers.

5.3.2 Soil Exposure Pathway Conclusions

Three soil samples were collected at the site. No detected VOC concentration exceeded an EPA RSL or SCDM benchmark in any sample. Therefore, soil exposure pathway does not appear to pose a threat to public health.

5.4 OTHER MIGRATION PATHWAYS

Surface water and air migration pathways were not evaluated, and no samples of these media were collected because no indication of contamination along surface water or air pathways has been reported at the site.

6.0 REMOVAL ACTION CONSIDERATIONS

The National Contingency Plan (40 *Code of Federal Regulations* [CFR] 300.415(b) (2)) authorizes EPA to consider removal actions at those facilities that pose an imminent threat to human health or the environment. Based on data obtained during this PA, a referral to EPA Region 7 for emergency response activities does not appear necessary.

7.0 SUMMARY

The site is near the intersection of South 26th Street and Bayard Avenue in the Armourdale area of Kansas City, Kansas. The site includes commercial and industrial properties along Bayard Avenue between 18th Street Expressway and South 26th Street. Major industrial facilities in the area include the Procter and Gamble plant (south) and a Union Pacific Railroad rail yard (north).

In 1981, several VOCs were detected in an industrial supply well used by Procter and Gamble (Well #11), including vinyl chloride, 1,1-DCE, 1,2-DCE, 1,1-DCA, 1,2-DCA, and benzene. Proctor and Gamble's Well #11 and Well # 12 were removed from service in 1991, and both were plugged in 2005. These wells were industrial water supply wells, not used for drinking water purposes. Several investigations by KDHE identified detectable concentrations of VOCs in groundwater in the vicinity of the former Proctor and Gamble Well #11 and in the area of 26th Street and Bayard Avenue. No documentation of a specific release or indication of a likely source of contamination was identified. KDHE recommended further sampling and referred the site to EPA for evaluation.

Contamination to soil and groundwater in the area of 26th and Bayard Avenue has been documented by analysis of soil and groundwater samples. Results from soil samples indicated detections of acetone and 1,1-DCE; however, no detection exceeded an EPA RSL or SCDM benchmark. Results from groundwater samples indicated that the previously documented groundwater contamination persists in the area of the site. Concentrations of VOCs; 1,1-DCE, TCE, and vinyl chloride exceeded EPA MCLs and/or EPA SCDM benchmarks in groundwater samples collected at eight of the 10 temporary well locations along 26th and Bayard Avenue. Boundaries of the groundwater contamination plume have not been delineated.

The general objective of the PA was to determine whether any threats to human health or the environment exist as a result of releases to soil and/or groundwater, and/or vapor intrusion. Additional sampling is recommended to determine if complete contaminated migration pathways exist, and to delineate the extent of the contaminated groundwater plume.

8.0 REFERENCES

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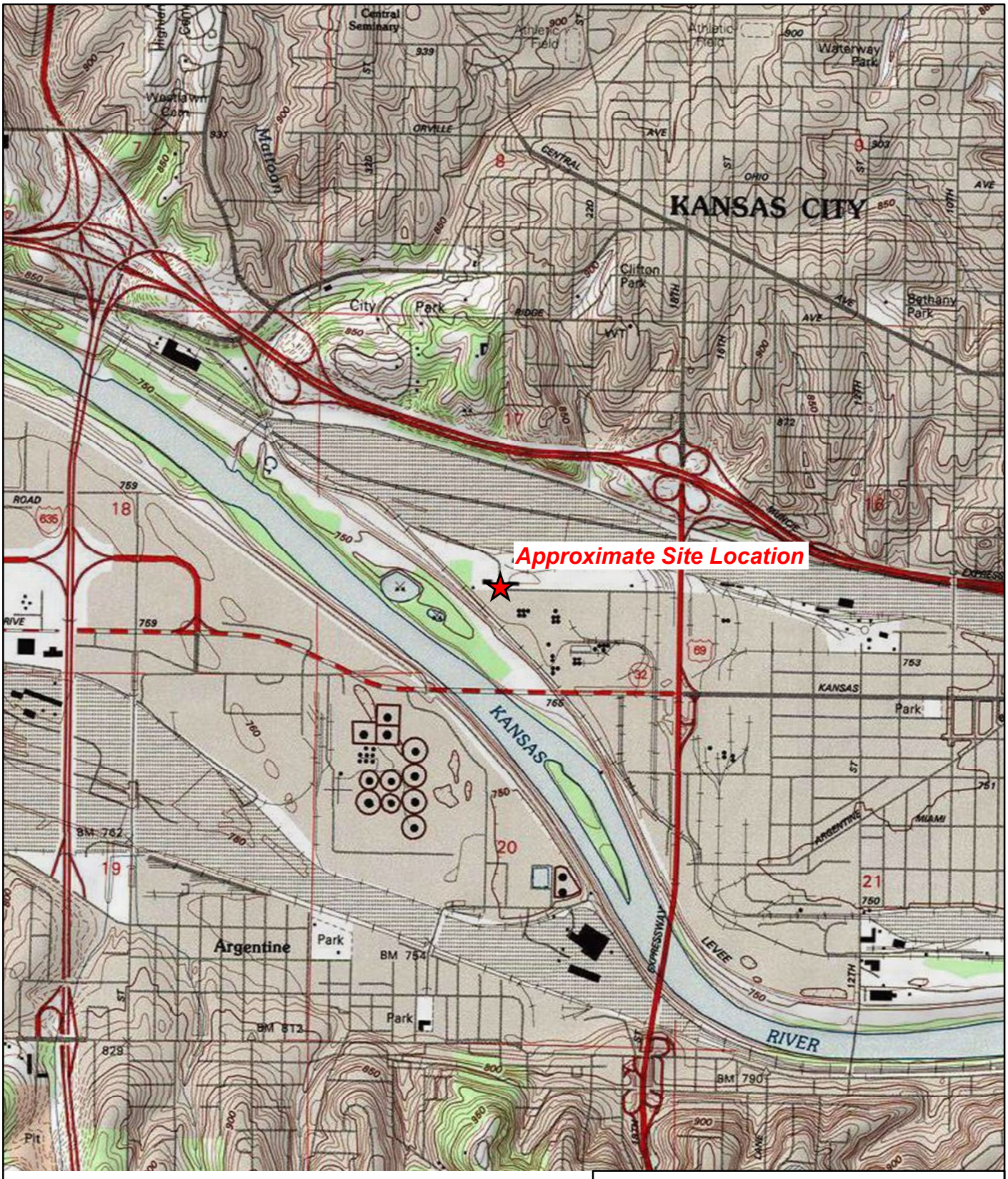
APPENDIX A

FIGURES



Source: USGS Shawnee, KS 7.5 Minute Topo Quad, 1991;

26th and Bayard Avenue
Kansas City, Kansas

Figure 1
Site Location Map

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Date: 5/5/2017 Drawn By: Clayton Hayes Project No: X9025.16.0107.002

X:\G9025\0107002\Projects\mxd\Figure1.mxd

Legend

- DPT groundwater sample location
- DPT soil gas and groundwater sample location
- DPT soil, soil gas and groundwater sample location
- Proctor & Gamble well location

DPT Direct push technology

Source: ESRI, ArcGIS Online, World Imagery, 2014

N

0 200 400

Feet

26th and Bayard Avenue
Kansas City, Kansas

Figure 2

DPT Sample Location Map

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Date: 9/21/2017 Drawn By: Clayton Hayes Project No: X9025.16.0107.002

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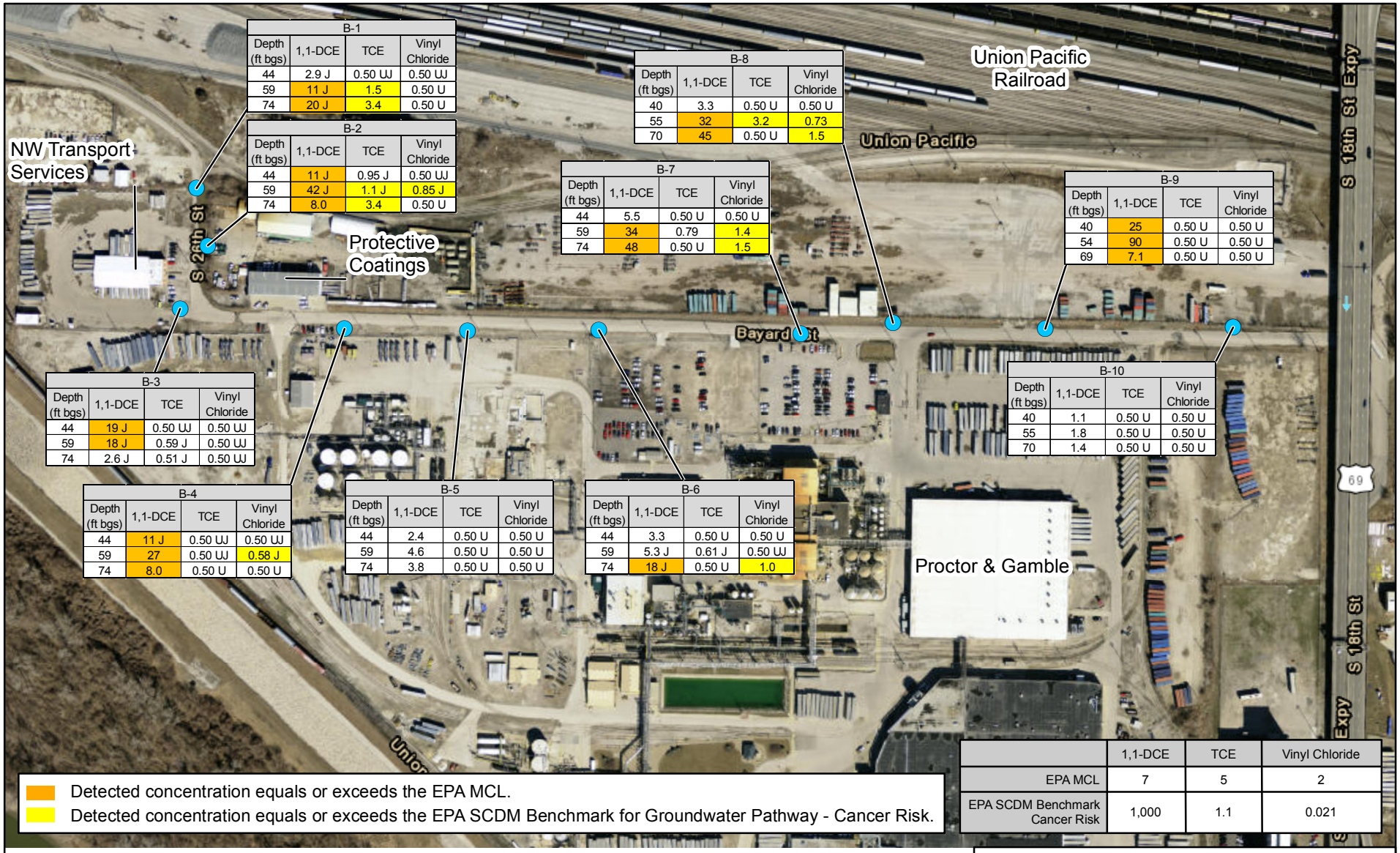

B-1

Depth (ft bgs)	1,1-DCE	TCE	Vinyl Chloride
44	2.9 J	0.50 UJ	0.50 UJ
59	11 J	1.5	0.50 U
74	20 J	3.4	0.50 U

B-2

Depth (ft bgs)	1,1-DCE	TCE	Vinyl Chloride
44	11 J	0.95 J	0.50 UJ
59	42 J	1.1 J	0.85 J
74	8.0	3.4	0.50 U

B-3

Depth (ft bgs)	1,1-DCE	TCE	Vinyl Chloride
44	19 J	0.50 UJ	0.50 UJ
59	18 J	0.59 J	0.50 UJ
74	2.6 J	0.51 J	0.50 UJ

B-4

Depth (ft bgs)	1,1-DCE	TCE	Vinyl Chloride
44	11 J	0.50 UJ	0.50 UJ
59	27	0.50 UJ	0.58 J
74	8.0	0.50 U	0.50 U

B-5

Depth (ft bgs)	1,1-DCE	TCE	Vinyl Chloride
44	2.4	0.50 U	0.50 U
59	4.6	0.50 U	0.50 U
74	3.8	0.50 U	0.50 U

B-6

Depth (ft bgs)	1,1-DCE	TCE	Vinyl Chloride
44	3.3	0.50 U	0.50 U
59	5.3 J	0.61 J	0.50 UJ
74	18 J	0.50 U	1.0

B-7

Depth (ft bgs)	1,1-DCE	TCE	Vinyl Chloride
44	5.5	0.50 U	0.50 U
59	34	0.79	1.4
74	48	0.50 U	1.5

B-8

Depth (ft bgs)	1,1-DCE	TCE	Vinyl Chloride
40	3.3	0.50 U	0.50 U
55	32	3.2	0.73
70	45	0.50 U	1.5

B-9

Depth (ft bgs)	1,1-DCE	TCE	Vinyl Chloride
40	25	0.50 U	0.50 U
54	90	0.50 U	0.50 U
69	7.1	0.50 U	0.50 U

B-10

Depth (ft bgs)	1,1-DCE	TCE	Vinyl Chloride
40	1.1	0.50 U	0.50 U
55	1.8	0.50 U	0.50 U
70	1.4	0.50 U	0.50 U

Detected concentration equals or exceeds the EPA MCL.
Detected concentration equals or exceeds the EPA SCDM Benchmark for Groundwater Pathway - Cancer Risk.

	1,1-DCE	TCE	Vinyl Chloride
EPA MCL	7	5	2
EPA SCDM Benchmark Cancer Risk	1,000	1.1	0.021

Legend
- DPT groundwater sample location
- DCE Dichloroethene
- DPT Direct push technology
- EPA Environmental Protection Agency
- ft bgs Feet below ground surface
- J Estimate value

- MCL Maximum Contaminant Level
- SCDM Superfund Chemical Data Matrix
- TCE Trichloroethene
- U Not detected at or above reporting limit
- µg/L Micrograms per liter

N
0 160 320
Feet

Source: ESRI, ArcGIS Online, World Imagery, 2014

Note: All concentrations are in µg/L.

26th and Bayard Avenue
Kansas City, Kansas

Figure 3
1,1-DCE, TCE, and Vinyl Chloride Concentrations in Groundwater

TETRA TECH

Date: 11/19/2017 Drawn By: Clayton Hayes Project No: X9025.16.0107.002

X:\G\9025\0107\002\Projects\mxd\Figure3.mxd

APPENDIX B

FIELD SHEETS AND CHAIN OF CUSTODY

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7553 **Sample Number:** 1 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7553-1-__

Project ID: JF26BAVE **Project Manager:** John Frey
Project Desc: 26th and Bayard Avenue site
City: Kansas City **State:** Kansas
Program: Superfund
Site Name: Multi-Site - General **Site ID:** 07ZZ **Site OU:** 00

Location Desc: B-1 (32')

External Sample Number: B-1 (32')

Expected Conc: (or Circle One: (Low) Medium High) **Date** **Time(24 hr)**

Latitude: N39.09226 **Sample Collection: Start:** 8/8/17 09:05
Longitude: W94.65866 **End:** __/__/__ __:__

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, sodium bisulfate (2 vials), MeOH (1 vial)	14 Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap

Sample Comments:

(N/A)

MS/MSD VOLUME

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7553 **Sample Number:** 2 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7553-2-__

Project ID: JF26BAVE **Project Manager:** John Frey
Project Desc: 26th and Bayard Avenue site
City: Kansas City **State:** Kansas
Program: Superfund
Site Name: Multi-Site - General **Site ID:** 07ZZ **Site OU:** 00

Location Desc: B-5 (26')

External Sample Number: B-5(26')

Expected Conc: (or Circle One: (Low) Medium High)

		Date	Time(24 hr)
Latitude: N39.09140	**Sample Collection: Start:**	8/8/17	12:45
Longitude: W94.65646	**End:**	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, sodium bisulfate (2 vials), MeOH (1 vial)	14 Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7553 **Sample Number:** 3 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7553-3-__

Project ID: JF26BAVE **Project Manager:** John Frey
Project Desc: 26th and Bayard Avenue site
City: Kansas City **State:** Kansas
Program: Superfund
Site Name: Multi-Site - General **Site ID:** 07ZZ **Site OU:** 00

Location Desc: B-9 (9')

External Sample Number: B9 (9')

Expected Conc: (or Circle One: (Low) Medium High) **Date** **Time(24 hr)**

Latitude: N39.09148 **Sample Collection: Start:** 8/9/17 09:40
Longitude: W94.65183 **End:** __/__/__ __:__

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, sodium bisulfate (2 vials), MeOH (1 vial)	14 Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7553 **Sample Number:** 101 **QC Code:** __ **Matrix:** Water **Tag ID:** 7553-101-__

Project ID: JF26BAVE **Project Manager:** John Frey
Project Desc: 26th and Bayard Avenue site
City: Kansas City **State:** Kansas
Program: Superfund
Site Name: Multi-Site - General **Site ID:** 07ZZ **Site OU:** 00

Location Desc: B-1 (74')

External Sample Number: B-1 (74')

Expected Conc: (or Circle One: Low Medium High) **Date** **Time(24 hr)**

Latitude: N39.09226 **Sample Collection: Start:** 8/8/17 09:27
Longitude: W94.65866 **End:** __/__/__ __:__

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
3 - 40mL VOA vial	4 Deg C, HCL to pH<2	14 Days	1 VOCs in Water by GC/MS for Low Detection Limits

Sample Comments:

(N/A)

MS/MSD VOLUME

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7553 **Sample Number:** 102 **QC Code:** __ **Matrix:** Water **Tag ID:** 7553-102-__

Project ID: JF26BAVE **Project Manager:** John Frey
Project Desc: 26th and Bayard Avenue site
City: Kansas City **State:** Kansas
Program: Superfund
Site Name: Multi-Site - General **Site ID:** 07ZZ **Site OU:** 00

Location Desc: B-1 (59')

External Sample Number: B-1 (59')

Expected Conc: (or Circle One: (Low) Medium High) **Date** **Time(24 hr)**

Latitude: N39.09226 **Sample Collection: Start:** 8/8/17 09:35
Longitude: W94.65866 **End:** __/__/__ __:__

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
3 - 40mL VOA vial	4 Deg C, HCL to pH<2	14 Days	1 VOCs in Water by GC/MS for Low Detection Limits

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7553 **Sample Number:** 103 **QC Code:** __ **Matrix:** Water **Tag ID:** 7553-103-__

Project ID: JF26BAVE **Project Manager:** John Frey
Project Desc: 26th and Bayard Avenue site
City: Kansas City **State:** Kansas
Program: Superfund
Site Name: Multi-Site - General **Site ID:** 07ZZ **Site OU:** 00

Location Desc: B-1 (44')

External Sample Number: B-1 (44')

Expected Conc: (or Circle One: Low Medium High)

		Date	Time(24 hr)
Latitude: N39.09226	**Sample Collection: Start:**	8/8/17	09:40
Longitude: W94.65866	**End:**	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
3 - 40mL VOA vial	4 Deg C, HCL to pH<2	14 Days	1 VOCs in Water by GC/MS for Low Detection Limits

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7553 **Sample Number:** 104 **QC Code:** __ **Matrix:** Water **Tag ID:** 7553-104-__

Project ID: JF26BAVE **Project Manager:** John Frey
Project Desc: 26th and Bayard Avenue site
City: Kansas City **State:** Kansas
Program: Superfund .
Site Name: Multi-Site - General **Site ID:** 07ZZ **Site OU:** 00

Location Desc: B-2(74')

External Sample Number: B-2(74')

Expected Conc: (or Circle One: (Low) Medium High) **Date** **Time(24 hr)**

Latitude: N39.09216 **Sample Collection: Start:** 8/8/17 10:20
Longitude: W94.65859 **End:** __/__/__ __:__

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
3 - 40mL VOA vial	4 Deg C, HCL to pH<2	14 Days	1 VOCs in Water by GC/MS for Low Detection Limits

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7553 **Sample Number:** 105 **QC Code:** __ **Matrix:** Water **Tag ID:** 7553-105-__

Project ID: JF26BAVE **Project Manager:** John Frey
Project Desc: 26th and Bayard Avenue site
City: Kansas City **State:** Kansas
Program: Superfund
Site Name: Multi-Site - General **Site ID:** 07ZZ **Site OU:** 00

Location Desc: B-2 (59')

External Sample Number: B-2 (59')

Expected Conc: (or Circle One: (Low) Medium High)

		Date	Time(24 hr)
Latitude: N39.09216	**Sample Collection: Start:**	8/8/17	10:26
Longitude: W94.65859	**End:**	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
3 - 40mL VOA vial	4 Deg C, HCL to pH<2	14 Days	1 VOCs in Water by GC/MS for Low Detection Limits

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7553 **Sample Number:** 106 **QC Code:** __ **Matrix:** Water **Tag ID:** 7553-106-__

Project ID: JF26BAVE **Project Manager:** John Frey
Project Desc: 26th and Bayard Avenue site
City: Kansas City **State:** Kansas
Program: Superfund
Site Name: Multi-Site - General **Site ID:** 07ZZ **Site OU:** 00

Location Desc: B-2 (44')

External Sample Number: B-2 (44')

Expected Conc: (or Circle One: (Low) Medium High) **Date** **Time(24 hr)**

Latitude: N39.09216 **Sample Collection: Start:** 8/8/17 10:33
Longitude: W94.65859 **End:** __/__/__ __:__

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
3 - 40mL VOA vial	4 Deg C, HCL to pH<2	14 Days	1 VOCs in Water by GC/MS for Low Detection Limits

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7553 **Sample Number:** 107 **QC Code:** __ **Matrix:** Water **Tag ID:** 7553-107-__

Project ID: JF26BAVE **Project Manager:** John Frey
Project Desc: 26th and Bayard Avenue site
City: Kansas City **State:** Kansas
Program: Superfund
Site Name: Multi-Site - General **Site ID:** 07ZZ **Site OU:** 00

Location Desc: B-3 (74')

External Sample Number: B-3 (74')

Expected Conc: (or Circle One: (Low) Medium High) **Date** **Time(24 hr)**

Latitude: N39.09140 **Sample Collection: Start:** 8/8/17 11:10
Longitude: W94.65894 **End:** __/__/__ __:__

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
3 - 40mL VOA vial	4 Deg C, HCL to pH<2	14 Days	1 VOCs in Water by GC/MS for Low Detection Limits

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7553 **Sample Number:** 108 **QC Code:** __ **Matrix:** Water **Tag ID:** 7553-108-__

Project ID: JF26BAVE **Project Manager:** John Frey
Project Desc: 26th and Bayard Avenue site
City: Kansas City **State:** Kansas
Program: Superfund
Site Name: Multi-Site - General **Site ID:** 07ZZ **Site OU:** 00

Location Desc: B-3 (59')

External Sample Number: B-3(59')

Expected Conc: (or Circle One: (Low) Medium High) **Date** **Time(24 hr)**

Latitude: N39.09140 **Sample Collection: Start:** 8/8/17 11:15
Longitude: W94.65894 **End:** __/__/__ __:__

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
3 - 40mL VOA vial	4 Deg C, HCL to pH<2	14 Days	1 VOCs in Water by GC/MS for Low Detection Limits

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7553 **Sample Number:** 109 **QC Code:** __ **Matrix:** Water **Tag ID:** 7553-109-__

Project ID: JF26BAVE **Project Manager:** John Frey
Project Desc: 26th and Bayard Avenue site
City: Kansas City **State:** Kansas
Program: Superfund
Site Name: Multi-Site - General **Site ID:** 07ZZ **Site OU:** 00

Location Desc: B-3 (44')

External Sample Number: B-3 (44')

Expected Conc: (or Circle One: (Low) Medium High) **Date** **Time(24 hr)**

Latitude: N39.09140 **Sample Collection: Start:** 8/8/17 11:20
Longitude: W94.65894 **End:** __/__/__ __:__

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
3 - 40mL VOA vial	4 Deg C, HCL to pH<2	14 Days	1 VOCs in Water by GC/MS for Low Detection Limits

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7553 **Sample Number:** 110 **QC Code:** __ **Matrix:** Water **Tag ID:** 7553-110-__

Project ID: JF26BAVE **Project Manager:** John Frey
Project Desc: 26th and Bayard Avenue site
City: Kansas City **State:** Kansas
Program: Superfund
Site Name: Multi-Site - General **Site ID:** 07ZZ **Site OU:** 00

Location Desc: B-4(74')

External Sample Number: B-4(74')

Expected Conc: (or Circle One: (Low) Medium High) **Date** **Time(24 hr)**

Latitude: N39.09140 **Sample Collection: Start:** 8/8/17 11:50
Longitude: W94.65745 **End:** __/__/__ __:__

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
3 - 40mL VOA vial	4 Deg C, HCL to pH<2	14 Days	1 VOCs in Water by GC/MS for Low Detection Limits

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7553 **Sample Number:** 111 **QC Code:** __ **Matrix:** Water **Tag ID:** 7553-111-__

Project ID: JF26BAVE **Project Manager:** John Frey
Project Desc: 26th and Bayard Avenue site
City: Kansas City **State:** Kansas
Program: Superfund
Site Name: Multi-Site - General **Site ID:** 07ZZ **Site OU:** 00

Location Desc: B-4(59')

External Sample Number: B-4(59')

Expected Conc: (or Circle One: (Low) Medium High)

		Date	Time(24 hr)
Latitude: N39.09140	**Sample Collection: Start:**	8/8/17	11:55
Longitude: W94.65745	**End:**	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
3 - 40mL VOA vial	4 Deg C, HCL to pH<2	14 Days	1 VOCs in Water by GC/MS for Low Detection Limits

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7553 **Sample Number:** 112 **QC Code:** __ **Matrix:** Water **Tag ID:** 7553-112-__

Project ID: JF26BAVE **Project Manager:** John Frey
Project Desc: 26th and Bayard Avenue site
City: Kansas City **State:** Kansas
Program: Superfund
Site Name: Multi-Site - General **Site ID:** 07ZZ **Site OU:** 00

Location Desc: B-4(44')

External Sample Number: B-4(44')

Expected Conc: (or Circle One: (Low) Medium High) **Date** **Time(24 hr)**

Latitude: N39.09140 **Sample Collection: Start:** 8/8/17 12:00
Longitude: W94.65745 **End:** __/__/__ __:__

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
3 - 40mL VOA vial	4 Deg C, HCL to pH<2	14 Days	1 VOCs in Water by GC/MS for Low Detection Limits

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7553 **Sample Number:** 113 **QC Code:** __ **Matrix:** Water **Tag ID:** 7553-113-__

Project ID: JF26BAVE **Project Manager:** John Frey
Project Desc: 26th and Bayard Avenue site
City: Kansas City **State:** Kansas
Program: Superfund
Site Name: Multi-Site - General **Site ID:** 07ZZ **Site OU:** 00

Location Desc: B-5 (74')

External Sample Number: B-5(74')

Expected Conc: (or Circle One: (Low) Medium High)

		Date	Time(24 hr)
Latitude: N39.09140	**Sample Collection: Start:**	8/8/17	13:25
Longitude: W94.65646	**End:**	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
3 - 40mL VOA vial	4 Deg C, HCL to pH<2	14 Days	1 VOCs in Water by GC/MS for Low Detection Limits

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7553 **Sample Number:** 114 **QC Code:** __ **Matrix:** Water **Tag ID:** 7553-114-__

Project ID: JF26BAVE **Project Manager:** John Frey
Project Desc: 26th and Bayard Avenue site
City: Kansas City **State:** Kansas
Program: Superfund
Site Name: Multi-Site - General **Site ID:** 07ZZ **Site OU:** 00

Location Desc: B-5 (59')

External Sample Number: B-5 (59')

Expected Conc: (or Circle One: (Low) Medium High)

		Date	Time(24 hr)
Latitude: N39.09140	**Sample Collection: Start:**	8/8/17	13:30
Longitude: W94.65646	**End:**	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
3 - 40mL VOA vial	4 Deg C, HCL to pH<2	14 Days	1 VOCs in Water by GC/MS for Low Detection Limits

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7553 **Sample Number:** 115 **QC Code:** __ **Matrix:** Water **Tag ID:** 7553-115-__

Project ID: JF26BAVE **Project Manager:** John Frey
Project Desc: 26th and Bayard Avenue site
City: Kansas City **State:** Kansas
Program: Superfund
Site Name: Multi-Site - General **Site ID:** 07ZZ **Site OU:** 00

Location Desc: B-5 (44')

External Sample Number: B-5 (44')

Expected Conc: (or Circle One: (Low) Medium High) **Date** **Time(24 hr)**

Latitude: N39.09140 **Sample Collection: Start:** 8/8/17 13:35
Longitude: W94.65646 **End:** __/__/__ __:__

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
3 - 40mL VOA vial	4 Deg C, HCL to pH<2	14 Days	1 VOCs in Water by GC/MS for Low Detection Limits

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7553 **Sample Number:** 116 **QC Code:** __ **Matrix:** Water **Tag ID:** 7553-116-__

Project ID: JF26BAVE **Project Manager:** John Frey
Project Desc: 26th and Bayard Avenue site
City: Kansas City **State:** Kansas
Program: Superfund
Site Name: Multi-Site - General **Site ID:** 07ZZ **Site OU:** 00

Location Desc: B-6 (74')

External Sample Number: B-6 (74')

Expected Conc: (or Circle One: (Low) Medium High) **Date** **Time(24 hr)**

Latitude: N39.09142 **Sample Collection: Start:** 8/8/17 14:13
Longitude: W94.65541 **End:** __/__/__ __:__

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
3 - 40mL VOA vial	4 Deg C, HCL to pH<2	14 Days	1 VOCs in Water by GC/MS for Low Detection Limits

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7553 **Sample Number:** 117 **QC Code:** __ **Matrix:** Water **Tag ID:** 7553-117-__

Project ID: JF26BAVE **Project Manager:** John Frey
Project Desc: 26th and Bayard Avenue site
City: Kansas City **State:** Kansas
Program: Superfund
Site Name: Multi-Site - General **Site ID:** 07ZZ **Site OU:** 00

Location Desc: B-6 (59')

External Sample Number: B-6 (59')

Expected Conc: (or Circle One: ~~Low~~ Medium High) **Date** **Time(24 hr)**

Latitude: N39.09142 **Sample Collection: Start:** 8/8/17 14:19
Longitude: W94.65541 **End:** __/__/__ __:__

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
3 - 40mL VOA vial	4 Deg C, HCL to pH<2	14 Days	1 VOCs in Water by GC/MS for Low Detection Limits

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7553 **Sample Number:** 118 **QC Code:** __ **Matrix:** Water **Tag ID:** 7553-118-__

Project ID: JF26BAVE **Project Manager:** John Frey
Project Desc: 26th and Bayard Avenue site
City: Kansas City **State:** Kansas
Program: Superfund
Site Name: Multi-Site - General **Site ID:** 07ZZ **Site OU:** 00

Location Desc: B-6(44')

External Sample Number: B-6(44')

Expected Conc: (or Circle One: (Low) Medium High) **Date** **Time(24 hr)**

Latitude: N39.09142 **Sample Collection: Start:** 8/8/17 14:26
Longitude: W94.65541 **End:** __/__/__ __:__

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
3 - 40mL VOA vial	4 Deg C, HCL to pH<2	14 Days	1 VOCs in Water by GC/MS for Low Detection Limits

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7553 **Sample Number:** 119 **QC Code:** __ **Matrix:** Water **Tag ID:** 7553-119-__

Project ID: JF26BAVE **Project Manager:** John Frey
Project Desc: 26th and Bayard Avenue site
City: Kansas City **State:** Kansas
Program: Superfund
Site Name: Multi-Site - General **Site ID:** 07ZZ **Site OU:** 00

Location Desc: B-7 (74')

External Sample Number: B-7 (74')

Expected Conc: (or Circle One: (Low) Medium High) **Date** **Time(24 hr)**

Latitude: N39.09142 **Sample Collection: Start:** 8/8/17 15:07
Longitude: W94.65379 **End:** __/__/__ __:__

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
3 - 40mL VOA vial	4 Deg C, HCL to pH<2	14 Days	1 VOCs in Water by GC/MS for Low Detection Limits

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7553 **Sample Number:** 120 **QC Code:** __ **Matrix:** Water **Tag ID:** 7553-120-__

Project ID: JF26BAVE **Project Manager:** John Frey
Project Desc: 26th and Bayard Avenue site
City: Kansas City **State:** Kansas
Program: Superfund
Site Name: Multi-Site - General **Site ID:** 07ZZ **Site OU:** 00

Location Desc: B-7 (59')

External Sample Number: B-7 (59')

Expected Conc: (or Circle One: (Low) Medium High) **Date** **Time(24 hr)**

Latitude: N39.09142 **Sample Collection: Start:** 8/8/17 15:15
Longitude: W94.65379 **End:** __/__/__ __:__

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
3 - 40mL VOA vial	4 Deg C, HCL to pH<2	14 Days	1 VOCs in Water by GC/MS for Low Detection Limits

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7553 **Sample Number:** 121 **QC Code:** __ **Matrix:** Water **Tag ID:** 7553-121-__

Project ID: JF26BAVE **Project Manager:** John Frey
Project Desc: 26th and Bayard Avenue site
City: Kansas City **State:** Kansas
Program: Superfund
Site Name: Multi-Site - General **Site ID:** 07ZZ **Site OU:** 00

Location Desc: B-7(44')

External Sample Number: B-7(44')

Expected Conc: (or Circle One: (Low) Medium High)

		Date	Time(24 hr)
Latitude: N39.09142	**Sample Collection: Start:**	8/8/17	15:20
Longitude: W94.65379	**End:**	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
3 - 40mL VOA vial	4 Deg C, HCL to pH<2	14 Days	1 VOCs in Water by GC/MS for Low Detection Limits

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7553 **Sample Number:** 122 **QC Code:** __ **Matrix:** Water **Tag ID:** 7553-122-__

Project ID: JF26BAVE **Project Manager:** John Frey
Project Desc: 26th and Bayard Avenue site
City: Kansas City **State:** Kansas
Program: Superfund
Site Name: Multi-Site - General **Site ID:** 07ZZ **Site OU:** 00

Location Desc: _____

External Sample Number: RINSATE BLANK

Expected Conc: (or Circle One: (Low) Medium High) **Date** **Time(24 hr)**

Latitude: ___ ___ ___ **Sample Collection: Start:** 8/8/17 15:29

Longitude: ___ ___ ___ **End:** __/__/__ __:__

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
3 - 40mL VOA vial	4 Deg C, HCL to pH<2	14 Days	1 VOCs in Water by GC/MS for Low Detection Limits

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7553 **Sample Number:** 123 **QC Code:** FB **Matrix:** Water **Tag ID:** 7553-123-FB

Project ID: JF26BAVE **Project Manager:** John Frey
Project Desc: 26th and Bayard Avenue site
City: Kansas City **State:** Kansas
Program: Superfund
Site Name: Multi-Site - General **Site ID:** 07ZZ **Site OU:** 00

Location Desc: _____

External Sample Number: FIELD BLANK

Expected Conc: (or Circle One: (Low) Medium High) **Date** **Time(24 hr)**

Latitude: ___ ___ ___ **Sample Collection: Start:** 8/8/17 15:35

Longitude: ___ ___ ___ **End:** __/__/__ __:__

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
3 - 40mL VOA vial	4 Deg C, HCL to pH<2	14 Days	1 VOCs in Water by GC/MS for Low Detection Limits

Sample Comments:

(N/A)

FIELD BLANK

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7553 **Sample Number:** 124 **QC Code:** __ **Matrix:** Water **Tag ID:** 7553-124-__

Project ID: JF26BAVE **Project Manager:** John Frey
Project Desc: 26th and Bayard Avenue site
City: Kansas City **State:** Kansas
Program: Superfund
Site Name: Multi-Site - General **Site ID:** 07ZZ **Site OU:** 00

Location Desc: B-9 (69')

External Sample Number: B-9 (69')

Expected Conc: (or Circle One: (Low) Medium High) **Date** **Time(24 hr)**

Latitude: N39.09148 **Sample Collection: Start:** 8/9/17 10:12
Longitude: W94.65183 **End:** __/__/__ __:__

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
3 - 40mL VOA vial	4 Deg C, HCL to pH<2	14 Days	1 VOCs in Water by GC/MS for Low Detection Limits

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7553 **Sample Number:** 125 **QC Code:** __ **Matrix:** Water **Tag ID:** 7553-125-__

Project ID: JF26BAVE **Project Manager:** John Frey
Project Desc: 26th and Bayard Avenue site
City: Kansas City **State:** Kansas
Program: Superfund
Site Name: Multi-Site - General **Site ID:** 07ZZ **Site OU:** 00

Location Desc: B-9 (54')

External Sample Number: B-9 (54')

Expected Conc: (or Circle One: (Low) Medium High) **Date** **Time(24 hr)**

Latitude: N39.09148 **Sample Collection: Start:** 8/9/17 10:20
Longitude: W94.65183 **End:** __/__/__ __:__

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
3 - 40mL VOA vial	4 Deg C, HCL to pH<2	14 Days	1 VOCs in Water by GC/MS for Low Detection Limits

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7553 **Sample Number:** 126 **QC Code:** __ **Matrix:** Water **Tag ID:** 7553-126-__

Project ID: JF26BAVE **Project Manager:** John Frey
Project Desc: 26th and Bayard Avenue site
City: Kansas City **State:** Kansas
Program: Superfund
Site Name: Multi-Site - General **Site ID:** 07ZZ **Site OU:** 00

Location Desc: B-9 (40')

External Sample Number: B-9 (40')

Expected Conc: (or Circle One: (Low) Medium High)

		Date	Time(24 hr)
Latitude: N37.09148	**Sample Collection: Start:**	8/9/17	10:28
Longitude: W94.65183	**End:**	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
3 - 40mL VOA vial	4 Deg C, HCL to pH<2	14 Days	1 VOCs in Water by GC/MS for Low Detection Limits

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7553 **Sample Number:** 127 **QC Code:** __ **Matrix:** Water **Tag ID:** 7553-127-__

Project ID: JF26BAVE **Project Manager:** John Frey
Project Desc: 26th and Bayard Avenue site
City: Kansas City **State:** Kansas
Program: Superfund
Site Name: Multi-Site - General **Site ID:** 07ZZ **Site OU:** 00

Location Desc: B-8(70')

External Sample Number: B-8 (70')

Expected Conc: (or Circle One: (Low) Medium High)

		Date	Time(24 hr)
Latitude: N39.09150	**Sample Collection: Start:**	8/9/17	1125
Longitude: W94.65305	**End:**	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
3 - 40mL VOA vial	4 Deg C, HCL to pH<2	14 Days	1 VOCs in Water by GC/MS for Low Detection Limits

Sample Comments:

(N/A)

MS/MSD VOLUME

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7553 **Sample Number:** 128 **QC Code:** __ **Matrix:** Water **Tag ID:** 7553-128-__

Project ID: JF26BAVE **Project Manager:** John Frey
Project Desc: 26th and Bayard Avenue site
City: Kansas City **State:** Kansas
Program: Superfund
Site Name: Multi-Site - General **Site ID:** 07ZZ **Site OU:** 00

Location Desc: B-8 (55')

External Sample Number: B-8(55')

Expected Conc: (or Circle One: (Low) Medium High)

		Date	Time(24 hr)
Latitude: N 39.09150	**Sample Collection: Start:**	8/9/17	11:30
Longitude: W 94.65305	**End:**	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
3 - 40mL VOA vial	4 Deg C, HCL to pH<2	14 Days	1 VOCs in Water by GC/MS for Low Detection Limits

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7553 **Sample Number:** 129 **QC Code:** __ **Matrix:** Water **Tag ID:** 7553-129-__

Project ID: JF26BAVE **Project Manager:** John Frey
Project Desc: 26th and Bayard Avenue site
City: Kansas City **State:** Kansas
Program: Superfund
Site Name: Multi-Site - General **Site ID:** 07ZZ **Site OU:** 00

Location Desc: B-8 (40')

External Sample Number: B-8 (40')

Expected Conc: (or Circle One: (Low) Medium High)

		Date	Time(24 hr)
Latitude: N39.09180	**Sample Collection: Start:**	8/9/17	11:45
Longitude: W94.65305	**End:**	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
3 - 40mL VOA vial	4 Deg C, HCL to pH<2	14 Days	1 VOCs in Water by GC/MS for Low Detection Limits

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7553 **Sample Number:** 130 **QC Code:** __ **Matrix:** Water **Tag ID:** 7553-130-__

Project ID: JF26BAVE **Project Manager:** John Frey
Project Desc: 26th and Bayard Avenue site
City: Kansas City **State:** Kansas
Program: Superfund
Site Name: Multi-Site - General **Site ID:** 07ZZ **Site OU:** 00

Location Desc: B-10 (70')

External Sample Number: B-10 (70')

Expected Conc: (or Circle One: (Low) Medium High)

		Date	Time(24 hr)
Latitude: N39.09151	**Sample Collection: Start:**	8/9/17	13:45
Longitude: W94.65032	**End:**	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
3 - 40mL VOA vial	4 Deg C, HCL to pH<2	14 Days	1 VOCs in Water by GC/MS for Low Detection Limits

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7553 **Sample Number:** 131 **QC Code:** __ **Matrix:** Water **Tag ID:** 7553-131-__

Project ID: JF26BAVE **Project Manager:** John Frey
Project Desc: 26th and Bayard Avenue site
City: Kansas City **State:** Kansas
Program: Superfund
Site Name: Multi-Site - General **Site ID:** 07ZZ **Site OU:** 00

Location Desc: B-10 (55')

External Sample Number: B-10 (55')

Expected Conc: (or Circle One: (Low) Medium High) **Date** **Time(24 hr)**

Latitude: N39.0915 **Sample Collection: Start:** 8/9/17 13:50
Longitude: W94.65032 **End:** __/__/__ __:__

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
3 - 40mL VOA vial	4 Deg C, HCL to pH<2	14 Days	1 VOCs in Water by GC/MS for Low Detection Limits

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7553 **Sample Number:** ~~131~~ 132 55 **QC Code:** __ **Matrix:** Water **Tag ID:** 7553-~~131~~ 132 JB

Project ID: JF26BAVE **Project Manager:** John Frey
Project Desc: 26th and Bayard Avenue site
City: Kansas City **State:** Kansas
Program: Superfund
Site Name: Multi-Site - General **Site ID:** 07ZZ **Site OU:** 00

Location Desc: B-10 (40')

External Sample Number: B-10 (40')

Expected Conc: (or Circle One: (Low) Medium High)

		Date	Time(24 hr)
Latitude: N39.09151	**Sample Collection: Start:**	8/9/10	13:55
Longitude: W94.65032	**End:**	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
3 - 40mL VOA vial	4 Deg C, HCL to pH<2	14 Days	1 VOCs in Water by GC/MS for Low Detection Limits

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7553 **Sample Number:** ~~132~~ 133 **QC Code:** FB **Matrix:** Water **Tag ID:** 7553-~~132~~ 133-FB

Project ID: JF26BAVE **Project Manager:** John Frey
Project Desc: 26th and Bayard Avenue site
City: Kansas City **State:** Kansas
Program: Superfund
Site Name: Multi-Site - General **Site ID:** 07ZZ **Site OU:** 00

Location Desc: LDL VOA Trip Blank sample

External Sample Number: TRIP BLANK

Expected Conc: (or Circle One: Low Medium High)

		Date	Time(24 hr)
Latitude: ___ ___ ___	**Sample Collection: Start:**	8/9/17	15:40
Longitude: ___ ___ ___	**End:**	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
3 - 40mL VOA vial	4 Deg C, HCL to pH<2	14 Days	1 VOCs in Water by GC/MS for Low Detection Limits

Sample Comments:

LTAB prepared Trip Blank sample.

Sample Collected By: TT

CHAIN OF CUSTODY RECORD
ENVIRONMENTAL PROTECTION AGENCY REGION VII

EPA PROJECT MANAGER (Print)	SITE OR SAMPLING EVENT	DATE OF SAMPLE COLLECTION(S)	SHEET
JOHN FREY	26th & BAYARD AVENUE	08 (MONTH) 08-09 (DAY) 2017 (YEAR)	1 of 2

CONTENTS OF SHIPMENT

TYPE OF CONTAINERS: VOA SET

ASR AND SAMPLE NUMBER	1 L PLASTIC BOTTLE	BOTTLE	BOTTLE	BVNALS/1 GS BOTTLE/TUBE	VOA SET (3 VIALS EA)	WATER	SOLID	HAZ WASTE	AIR	OTHER	RECEIVING LABORATORY REMARKS OTHER INFORMATION (condition of samples upon receipt, other sample numbers, etc.)
	NUMBER(S) OF CONTAINERS PER SAMPLE NUMBER					SAMPLED MEDIA					
7553-1				3			X				MS/MSD
-2				1			X				
-3				1			X				
-101					3	X					MS/MSD
-102					1	X					
-103					1	X					
-104					1	X					
-105					1	X					
-106					1	X					
-107					1	X					
-108					1	X					
-109					1	X					
-110					1	X					
-111					1	X					
-112					1	X					
-113					1	X					
-114					1	X					
-115					1	X					
-116					1	X					
-117					1	X					
-118					1	X					
-119					1	X					
-120					1	X					

DESCRIPTION OF SHIPMENT	MODE OF SHIPMENT
95 #131 CONTAINER(S) CONSISTING OF 0 CRATE(S)	____ COMMERCIAL CARRIER ____
1 ICE CHEST(S): OTHER ____	X SAMPLER CONVEYED ____ (SHIPPING AIRBILL NUMBER)

PERSONNEL CUSTODY RECORD

RELINQUISHED BY (PM/SAMPLER)	DATE	TIME	RECEIVED BY	DATE	TIME	REASON FOR CHANGE OF CUSTODY
☐ SEALED ☐ UNSEALED			☐ SEALED ☐ UNSEALED			
RELINQUISHED BY (PM/SAMPLER)	DATE	TIME	RECEIVED BY	DATE	TIME	REASON FOR CHANGE OF CUSTODY
☐ SEALED ☐ UNSEALED			☐ SEALED ☐ UNSEALED			
RELINQUISHED BY (PM/SAMPLER)	DATE	TIME	RECEIVED BY	DATE	TIME	REASON FOR CHANGE OF CUSTODY
☐ SEALED ☐ UNSEALED			☐ SEALED ☐ UNSEALED			
RELINQUISHED BY (PM/SAMPLER)	DATE	TIME	RECEIVED BY	DATE	TIME	REASON FOR CHANGE OF CUSTODY
☐ SEALED ☐ UNSEALED			☐ SEALED ☐ UNSEALED			

CHAIN OF CUSTODY RECORD
ENVIRONMENTAL PROTECTION AGENCY REGION VII

EPA PROJECT MANAGER (Print): JOHN FREY

SITE OR SAMPLING EVENT: 26th & BAYARD AVENUE

DATE OF SAMPLE COLLECTION(S): 08 (MONTH) 08-09 (DAY) 2014 (YEAR)

SHEET 2 of 2

CONTENTS OF SHIPMENT

ASR AND SAMPLE NUMBER	1 L PLASTIC BOTTLE	BOTTLE	BOTTLE	BOTTLE	VOA SET (3 VIALS EA)	WATER	SOLID	HAZ WASTE	AIR	OTHER	RECEIVING LABORATORY REMARKS OTHER INFORMATION (condition of samples upon receipt, other sample numbers, etc.)
7553-121					1	X					
-122					1	X					
-123FB					1	X					FIELD BLANK
-124					1	X					
-125					1	X					
-126					1	X					
-127					3	X					MS/MSD VOLUME
-128					1	X					
-129					1	X					
-130					1	X					
-131					1	X					
-132					1	X					
-133FB					1	X					TRIP BLANK

(NUMBER(S) OF CONTAINERS PER SAMPLE NUMBER)

ASR COMPLETE

DESCRIPTION OF SHIPMENT

131 CONTAINER(S) CONSISTING OF 0 CRATE(S)

1 ICE CHEST(S): OTHER ______

MODE OF SHIPMENT

____ COMMERCIAL CARRIER ______

X SAMPLER CONVEYED ______ (SHIPPING AIRBILL NUMBER)

PERSONNEL CUSTODY RECORD

RELINQUISHED BY (PM/SAMPLER)	DATE	TIME	RECEIVED BY	DATE	TIME	REASON FOR CHANGE OF CUSTODY
SEALED ☐ UNSEALED ☐			SEALED ☐ UNSEALED ☐			
SEALED ☐ UNSEALED ☐			SEALED ☐ UNSEALED ☐			
SEALED ☐ UNSEALED ☐			SEALED ☐ UNSEALED ☐			
SEALED ☐ UNSEALED ☐			SEALED ☐ UNSEALED ☐			

APPENDIX C

TABLES

TABLE 1

GROUNDWATER SAMPLE ANALYTICAL RESULTS
26TH AND BAYARD AVENUE SITE
KANSAS CITY, KANSAS

Location	Sample Number	Depth (ft bgs)	Sample Date	Analytes and Results (µg/L)										
				Acetone	Carbon Disulfide	Chlorobenzene	Chloroform	1,1-DCE	*cis* -1,2-DCE	*trans* -1,2-DCE	Ethylbenzene	Toluene	TCE	Vinyl Chloride
EPA MCL/MCLG				**NE**	**NE**	**100**	**70**	**7**	**70**	**100**	**700**	**1,000**	**5**	**2**
EPA SCDM Benchmark for Groundwater Pathway - Cancer Risk				**NE**	**NE**	**NE**	**2.5**	**NE**	**NE**	**NE**	**7**	**NE**	**1.1**	**0.021**
EPA SCDM Benchmark for Groundwater Pathway - Non-Cancer Risk				**10,000**	**2,000**	**400**	**200**	**1,000**	**400**	**40**	**2,000**	**1,000**	**10**	**60**
B-1	7553-103	44	8/8/2017	5.0 UJ	0.50 UJ	0.50 UJ	0.50 UJ	**2.9 J**	**3.6 J**	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
	7553-102	59	8/8/2017	5.0 U	0.50 U	0.50 U	0.50 U	**11 J**	**7.2 J**	**0.51 J**	0.50 U	0.50 U	**1.5**	0.50 U
	7553-101	74	8/8/2017	5.0 U	0.50 U	**1.1**	0.50 U	**20 J**	**31 J**	**1.7 J**	0.50 U	0.50 UJ	**3.4**	0.50 U
B-2	7553-106	44	8/8/2017	5.0 UJ	0.50 UJ	0.50 UJ	0.50 UJ	**11 J**	**4.1 J**	0.50 UJ	0.50 UJ	0.50 UJ	**0.95 J**	0.50 UJ
	7553-105	59	8/8/2017	5.0 UJ	0.50 UJ	0.50 UJ	0.50 UJ	**42 J**	**27 J**	**0.88 J**	0.50 UJ	0.50 UJ	**1.1 J**	**0.85 J**
	7553-104	74	8/8/2017	5.0 U	0.50 U	0.50 U	0.50 U	**8.0**	**12**	**0.92**	0.50 U	0.50 U	**3.4**	0.50 U
B-3	7553-109	44	8/8/2017	5.0 UJ	0.50 UJ	0.50 UJ	0.50 UJ	**19 J**	**19 J**	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
	7553-108	59	8/8/2017	5.0 UJ	0.50 UJ	0.50 UJ	0.50 UJ	**18 J**	**23 J**	0.50 UJ	0.50 UJ	0.50 UJ	**0.59 J**	0.50 UJ
	7553-107	74	8/8/2017	5.0 UJ	0.50 UJ	0.50 UJ	0.50 UJ	**2.6 J**	**6.6**	0.50 UJ	0.50 UJ	0.50 UJ	**0.51 J**	0.50 UJ
B-4	7553-112	44	8/8/2017	**10 J**	0.50 UJ	0.50 UJ	0.50 UJ	**11 J**	**2.6 J**	0.50 UJ	**0.52 J**	0.50 UJ	0.50 UJ	0.50 UJ
	7553-111	59	8/8/2017	5.0 UJ	0.50 UJ	0.50 UJ	0.50 UJ	**27**	**6.9 J**	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	**0.58 J**
	7553-110	74	8/8/2017	5.0 U	0.50 U	0.50 U	0.50 U	**8.0**	**4.5**	0.50 U	0.50 U	**0.79**	0.50 U	0.50 U
B-5	7553-115	44	8/8/2017	5.0 U	0.50 U	0.50 U	0.50 U	**2.4**	**1.1**	0.50 U	0.50 U	**0.51**	0.50 U	0.50 U
	7553-114	59	8/8/2017	5.0 U	0.50 U	0.50 U	0.50 U	**4.6**	**2.0**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	7553-113	74	8/8/2017	5.0 U	0.50 U	0.50 U	0.50 U	**3.8**	**2.9**	0.50 U	0.50 U	**0.85**	0.50 U	0.50 U
B-6	7553-118	44	8/8/2017	5.0 U	**0.63**	0.50 U	0.50 U	**3.3**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	7553-117	59	8/8/2017	5.0 UJ	0.50 UJ	0.50 UJ	0.50 UJ	**5.3 J**	**1.6 J**	0.50 UJ	0.50 UJ	0.50 UJ	**0.61 J**	0.50 UJ
	7553-116	74	8/8/2017	5.0 U	**1.0**	0.50 U	0.50 U	**18 J**	**1.5 J**	0.50 U	0.50 U	0.50 U	0.50 U	**1.0**
B-7	7553-121	44	8/8/2017	5.0 U	0.50 U	0.50 U	0.50 U	**5.5**	**0.59**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	7553-120	59	8/8/2017	5.0 U	**0.53**	0.50 U	0.50 U	**34**	**6.5 J**	**0.58 J**	0.50 U	**0.51**	**0.79**	**1.4**
	7553-119	74	8/8/2017	5.0 U	0.50 U	0.50 U	0.50 U	**48**	**2.6 J**	0.50 U	0.50 U	0.50 U	0.50 U	**1.5**
B-8	7553-129	40	8/9/2017	**11**	**0.91**	0.50 U	0.50 U	**3.3**	0.50 U	0.50 U	0.50 U	**0.55**	0.50 U	0.50 U
	7553-128	54	8/9/2017	5.0 U	0.50 U	0.50 U	0.50 U	**32**	**2.9 J**	0.50 U	0.50 U	0.50 U	**3.2**	**0.73**
	7553-127	69	8/9/2017	5.0 U	0.50 U	0.50 U	0.50 U	**45**	**1.3 J**	0.50 U	0.50 U	0.50 U	0.50 U	**1.5**
B-9	7553-126	40	8/9/2017	**5.9**	**0.94**	0.50 U	0.50 U	**25**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	7553-125	55	8/9/2017	5.0 U	0.50 U	0.50 U	0.50 U	**90**	0.50 U	0.50 U	**0.62**	**0.60**	0.50 U	0.50 U
	7553-124	70	8/9/2017	5.0 U	**0.71**	0.50 U	0.50 U	**7.1**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
B-10	7553-132	40	8/9/2017	**5.8**	**0.83**	0.50 U	0.50 U	**1.1**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	7553-131	55	8/9/2017	**6.1**	**1.6**	0.50 U	0.50 U	**1.8**	0.50 U	0.50 U	**1.1**	**0.97**	0.50 U	0.50 U
	7553-130	70	8/9/2017	5.0 U	**1.3**	0.50 U	0.50 U	**1.4**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Equipment Blank	7553-122	--	8/8/2017	5.0 U	**0.89**	0.50 U	**2.9**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Field Blank	7553-123-FB	--	8/8/2017	5.0 U	**1.10**	0.50 U	**3.4**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Trip Blank	7553-133-FB	--	8/9/2017	5.0 U	0.50 U	0.50 U	**0.61**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U

Notes:

Only analytes with concentrations above laboratory detection limits are presented.
Bold value indicates detection of analyte.

µg/L	Micrograms per liter
bgs	Below ground surface
DCE	Dichloroethene
EPA	Environmental Protection Agency
J	Identification of analyte acceptable; reported value is an estimate.
MCL	Maximum Contaminant Level
MCLG	Maximum Contaminant Level Goal
NE	Not established
SCDM	Superfund Chemical Data Matrix
TCE	Trichloroethene
U	Analyte not detected at or above reporting limit

Detected concentration equals or exceeds the EPA MCL.
Detected concentration equals or exceeds the EPA SCDM Benchmark for Groundwater Pathway - Cancer Risk
Detected concentration equals or exceeds the EPA SCDM Benchmark for Groundwater Pathway - Non-Cancer Risk

TABLE 2

SOIL SAMPLE ANALYTICAL RESULTS
26TH AND BAYARD AVENUE SITE
KANSAS CITY, KANSAS

Location	Sample Number	Depth (ft bgs)	Sample Date	Analytes and Results (µg/kg)	
				Acetone	1,1-DCE
EPA RSLs - Industrial Soil[1]				**67,000,000**	**100,000**
EPA SCDM Benchmark - Soil Exposure Component - Non-Cancer Risk				**70,000,000**	**3,000,000**
B-1	7553-1	32	8/8/2017	5.2 U	5.2 U
B-5	7553-2	26	8/8/2017	**33**	**71**
B-9	7553-3	9	8/9/2017	**19**	5.6 U

Notes:

[1]EPA Regional Screening Levels - Industrial Soil (TR=1.0 X 10^{-6}; THQ=0.1)

Only analytes with concentrations above laboratory detection limits are presented.
Bold value indicates detection of analyte.

µg/kg	Micrograms per kilogram
bgs	Below ground surface
DCE	Dichloroethene
EPA	U.S. Environmental Protection Agency
NA	Not applicable
RSL	Regional Screening Level
SCDM	Superfund Chemical Data Matrix
U	Analyte not detected at or above reporting limit

TABLE 3

SOIL GAS SAMPLE ANALYTICAL RESULTS
26TH AND BAYARD AVENUE SITE
KANSAS CITY, KANSAS

Location	Sample Number	Depth (ft bgs)	Sample Date	Analyte and Sample Results (µg/m^3)			
				cis -1,2-DCE	*trans* -1,2-DCE	PCE	TCE
			EPA VISL[1]	**NA**	**NA**	**140**	**7**
			EPA SCDM Benchmark[2] - Cancer Risk	**NE**	**NE**	**10**	**0.4**
			EPA SCDM Benchmark[2] - Non-Cancer Risk	**NE**	**800**	**40**	**2**
B-1	B-1	7	8/7/2017	3.5 U	3.5 U	3.5 U	3.5 U
B-2	B-2	7	8/7/2017	3.5 U	3.5 U	**16.23**	3.5 U
B-4	B-4	7	8/7/2017	3.5 U	3.5 U	3.5 U	3.5 U
B-5	B-5	7	8/7/2017	3.5 U	3.5 U	**4.42**	3.5 U
B-6	B-6	7	8/7/2017	3.5 U	3.5 U	3.5 U	3.5 U
B-7	B-7	7	8/7/2017	3.5 U	3.5 U	3.5 U	3.5 U
B-8	B-8	7	8/7/2017	3.5 U	3.5 U	**3.83**	3.5 U
B-9	B-9	7	8/7/2017	3.5 U	3.5 U	3.5 U	3.5 U
B-10	B-10	7	8/7/2017	3.5 U	3.5 U	**4.05**	**4626.59***

Notes:

[1]Target Sub-Slab and Exterior Soil Gas (TCR = 10^{-6}, THQ = 0.1)

[2]EPA SCDM Benchmark - Subsurface Intrusion Component
Bold value indicates detection of analyte.

µg/m^3	Micrograms per cubic meter
bgs	Below ground surface
DCE	Dichloroethene
EPA	Environmental Protection Agency
ft	feet
NE	Not established
PCE	Tetrachloroethene
SCDM	Superfund Chemical Data Matrix
TCE	Trichloroethene
THQ	Target hazard quotient
TCR	Target risk for carcinogens
U	The analyte was not detected at or above the reporting limit
VISL	Vapor intrusion screening level
*	Reported value is an estimate as it falls above quantitation limits

Detected concentration equals or exceeds the EPA VISL.

Detected concentration equals or exceeds the EPA SCDM Benchmark for Subsurface Intrusion - Cancer Risk

APPENDIX D

LABORATORY ANALYTICAL DATA

United States Environmental Protection Agency
Region 7
300 Minnesota Avenue
Kansas City, KS 66101

Date: 09/08/2017

Subject: Transmittal of Sample Analysis Results for ASR #: 7553

Project ID: JF26BAVE

Project Description: 26th and Bayard Avenue site

From: Margaret E.W. St. Germain, Chief
Laboratory Technology & Analysis Branch, Environmental Sciences & Technology Division

To: John Frey
SUPR/AERR/RRSS

Enclosed are the analytical data for the above-referenced Analytical Services Request (ASR) and Project. The Regional Laboratory has reviewed and verified the results in accordance with procedures described in our Quality Manual (QM). In addition to all of the analytical results, this transmittal contains pertinent information that may have influenced the reported results and documents any deviations from the established requirements of the QM.

Please contact us within 14 days of receipt of this package if you determine there is a need for any changes. Please complete the Online ASR Sample/Data Disposition and Customer Survey for this ASR as soon as possible. The process of disposing of the samples for this ASR will be initiated 30 days from the date of this transmittal unless an alternate release date is specified on the Online ASR Sample/Data Disposition and Customer Survey.

If you have any questions or concerns relating to this data package, contact our customer service line at 913-551-5295.

Enclosures

cc: Analytical Data File.

Project Manager: John Frey **Org:** SUPR/AERR/RRSS **Phone:** 913-551-7994

Project ID: JF26BAVE

Project Desc: 26th and Bayard Avenue site

Location: Kansas City **State:** Kansas **Program:** Superfund

Site Name: Multi-Site - General **Site ID:** 07ZZ **Site OU:** 00

Purpose: Site Preliminary Assessment **GPRA PRC:** 303DD2

CERCLIS ID: KSN000706244.
Soil and GW sampling in support of preliminary assessment (PA) at 26th and Bayard Avenue site.

Per EPA PM/Sampler submitted ASR: This site is not subject to a litigation hold at this time.

Explanation of Codes, Units and Qualifiers used on this report

Sample QC Codes: QC Codes identify the type of sample for quality control purpose.

__ = Field Sample
FB = Field Blank

Units: Specific units in which results are reported.

ug/L = Micrograms per Liter
ug/kg = Micrograms per Kilogram

Data Qualifiers: Specific codes used in conjunction with data values to provide additional information on the quality of reported results, or used to explain the absence of a specific value.

(Blank)= Values have been reviewed and found acceptable for use.
UJ = The analyte was not detected at or above the reporting limit. The reporting limit is an estimate.
U = The analyte was not detected at or above the reporting limit.
J = The identification of the analyte is acceptable; the reported value is an estimate.

ASR Number: 7553 **Sample Information Summary** **09/08/2017**

Project ID: JF26BAVE **Project Desc:** 26th and Bayard Avenue site

Sample No	QC Code	Matrix	Location Description	External Sample No	Start Date	Start Time	End Date	End Time	Receipt Date
1	__	Solid	B-1 (32')		08/08/2017	09:05			08/10/2017
2	__	Solid	B-5 (26')		08/08/2017	12:45			08/10/2017
3	__	Solid	B-9 (9')		08/09/2017	09:40			08/10/2017
101	__	Water	B-1 (74')		08/08/2017	09:27			08/10/2017
102	__	Water	B-1 (59')		08/08/2017	09:35			08/10/2017
103	__	Water	B-1 (44')		08/08/2017	09:40			08/10/2017
104	__	Water	B-2 (74')		08/08/2017	10:20			08/10/2017
105	__	Water	B-2 (59')		08/08/2017	10:26			08/10/2017
106	__	Water	B-2 (44')		08/08/2017	10:33			08/10/2017
107	__	Water	B-3 (74')		08/08/2017	11:10			08/10/2017
108	__	Water	B-3 (59')		08/08/2017	11:15			08/10/2017
109	__	Water	B-3 (44')		08/08/2017	11:20			08/10/2017
110	__	Water	B-4 (74')		08/08/2017	11:50			08/10/2017
111	__	Water	B-4 (59')		08/08/2017	11:55			08/10/2017
112	__	Water	B-4 (44')		08/08/2017	12:00			08/10/2017
113	__	Water	B-5 (74')		08/08/2017	13:25			08/10/2017
114	__	Water	B-5 (59')		08/08/2017	13:30			08/10/2017
115	__	Water	B-5 (44')		08/08/2017	13:35			08/10/2017
116	__	Water	B-6 (74')		08/08/2017	14:13			08/10/2017
117	__	Water	B-6 (59')		08/08/2017	14:19			08/10/2017
118	__	Water	B-6 (44')		08/08/2017	14:26			08/10/2017
119	__	Water	B-7 (74')		08/08/2017	15:07			08/10/2017
120	__	Water	B-7 (59')		08/08/2017	15:15			08/10/2017
121	__	Water	B-7 (44')		08/08/2017	15:20			08/10/2017
122	__	Water	Rinsate		08/08/2017	15:29			08/10/2017
123	FB	Water	Field Blank		08/08/2017	15:35			08/10/2017
124	__	Water	B-9 (69')		08/09/2017	10:12			08/10/2017
125	__	Water	B-9 (54')		08/09/2017	10:20			08/10/2017
126	__	Water	B-9 (40')		08/09/2017	10:28			08/10/2017
127	__	Water	B-8 (70')		08/09/2017	11:25			08/10/2017
128	__	Water	B-8 (55')		08/09/2017	11:30			08/10/2017
129	__	Water	B-8 (40')		08/09/2017	11:45			08/10/2017
130	__	Water	B-10 (70')		08/09/2017	13:45			08/10/2017
131	__	Water	B-10 (55')		08/09/2017	13:50			08/10/2017
132	__	Water	B-10 (40')		08/09/2017	13:55			08/10/2017
133	FB	Water	LDL VOA Trip Blank sample		08/09/2017	15:00			08/10/2017

Analysis **Comments About Results For This Analysis**

1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap

Lab: Contract Lab Program (Out-Source)

Method: CLP Statement of Work

Basis: Dry

Samples: 1-__ 2-__ 3-__

Comments:
Bromoform, 1,2-Dibromo-3-Chloropropane, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 1,2,3-Trichlorobenzene and 1,2,4-Trichlorobenzene were UJ-coded in sample -2. These analytes were not found in the sample at or above the reporting limits, however, the reporting limits are an estimate (UJ-coded) due to an internal standard recovery which was within the expanded minimum criteria.The actual reporting limits for these analytes may be higher than the reported values.

1 VOCs in Water by GC/MS for Low Detection Limits

Lab: Contract Lab Program (Out-Source)

Method: CLP Statement of Work

Samples:

101-__	102-__	103-__	104-__	105-__	106-__	107-__
108-__	109-__	110-__	111-__	112-__	113-__	114-__
115-__	116-__	117-__	118-__	119-__	120-__	121-__
122-__	123-FB	124-__	125-__	126-__	127-__	128-__
129-__	130-__	131-__	132-__	133-FB		

Comments:
The pH of samples -101 (and dilution only = 6), -102 (6), -103 (7), -105 (and dilution = 6), -106 (7), -107 (7), -108 (and dilution = 6), 109 (7), -111 (6), -112 (6), -114 (6), -115 (6), -117 (6), -120 (dilution only) = 6) and -125 (and dilution = 6) were above control limits (pH < 2.0).

Samples -101 (dilution), -103, -105, -105 (dilution), -106, -107, -109, -112 and -117 were analyzed 1 day past their 7 day holding time. Samples -108, -108(dilution), -111 were analyzed 2 days past their 7 day holding time. All positive results were reported with a J-code indicating that they are estimated values. The actual concentration of some or all analytes may have been higher than the reported result.

The results for analytes that were not found at or above the reporting limits in these samples were UJ-coded to indicate that the reporting limits are estimated values. The actual reporting limits may be higher than the reported values.

Bromomethane was UJ-coded in samples -121, -122, -123FB, -124, -125, -126, -127, -128, -129, -131, -132 and -133FB. This analyte was not found in the samples at or above the reporting limit, however, the reporting limit is an estimate (UJ-coded) due to the continuing calibration check not meeting accuracy specifications. The actual reporting limit for this analyte may be higher than the reported value.

1,1-Dichloroethene, cis-1,2-Dichloroethene and trans-1,2-Dichloroethene were J-coded in

Analysis	Comments About Results For This Analysis

samples -102, -108 and -116. 1,1-Dichloroethene and cis-1,2-Dichloroethene were J-coded in samples -106, -109, -112. Cis-1,2-Dichloroethene and trans-1,2-Dichloroethene were J coded in samples -101 and -120. Cis-1,2-Dichloroethene was J-coded in samples -111, -127 and -128. Trans-1,2-Dichloroethene was J-coded in sample -105. Acetone was J coded in sample -112. Although the analytes in question have been positively identified in the samples, the quantitation is an estimate (J-coded) due to high recoveries of surrogate analytes in these samples. The actual concentration for these analytes may be lower than the reported value.

1,1-Dichloroethene, cis-1,2-Dichloroethene and trans-1,2-Dichloroethene were UJ-coded in sample -122. These analytes were not found in the sample at or above the reporting limits; however, the reporting limits are an estimate (UJ-coded) due to low recovery of the surrogate analyte. The actual reporting limit for these analytes may be higher than the reported values.

Benzene and Toluene were UJ-coded in sample -101. This analyte was not found in the sample at or above the reporting limit, however, the reporting limit is an estimate (UJ-coded) due to poor precision obtained for this analyte in the laboratory matrix spike and matrix spike duplicate. The actual reporting limit for this analyte may be higher than the reported value.

Analysis/ Analyte	Units	1-__	2-__	3-__	101-__
1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap					
Acetone	ug/kg	10 U	33	19	
Benzene	ug/kg	5.2 U	7.8 U	5.6 U	
Bromochloromethane	ug/kg	5.2 U	7.8 U	5.6 U	
Bromodichloromethane	ug/kg	5.2 U	7.8 U	5.6 U	
Bromoform	ug/kg	5.2 U	7.8 UJ	5.6 U	
Bromomethane	ug/kg	5.2 U	7.8 U	5.6 U	
2-Butanone	ug/kg	10 U	16 U	11 U	
Carbon Disulfide	ug/kg	5.2 U	7.8 U	5.6 U	
Carbon Tetrachloride	ug/kg	5.2 U	7.8 U	5.6 U	
Chlorobenzene	ug/kg	5.2 U	7.8 U	5.6 U	
Chloroethane	ug/kg	5.2 U	7.8 U	5.6 U	
Chloroform	ug/kg	5.2 U	7.8 U	5.6 U	
Chloromethane	ug/kg	5.2 U	7.8 U	5.6 U	
Cyclohexane	ug/kg	5.2 U	7.8 U	5.6 U	
1,2-Dibromo-3-Chloropropane	ug/kg	5.2 U	7.8 UJ	5.6 U	
Dibromochloromethane	ug/kg	5.2 U	7.8 U	5.6 U	
1,2-Dibromoethane	ug/kg	5.2 U	7.8 U	5.6 U	
1,2-Dichlorobenzene	ug/kg	5.2 U	7.8 UJ	5.6 U	
1,3-Dichlorobenzene	ug/kg	5.2 U	7.8 UJ	5.6 U	
1,4-Dichlorobenzene	ug/kg	5.2 U	7.8 UJ	5.6 U	
Dichlorodifluoromethane	ug/kg	5.2 U	7.8 U	5.6 U	
1,1-Dichloroethane	ug/kg	5.2 U	7.8 U	5.6 U	
1,2-Dichloroethane	ug/kg	5.2 U	7.8 U	5.6 U	
1,1-Dichloroethene	ug/kg	5.2 U	71	5.6 U	
cis-1,2-Dichloroethene	ug/kg	5.2 U	7.8 U	5.6 U	
trans-1,2-Dichloroethene	ug/kg	5.2 U	7.8 U	5.6 U	
1,2-Dichloropropane	ug/kg	5.2 U	7.8 U	5.6 U	
cis-1,3-Dichloropropene	ug/kg	5.2 U	7.8 U	5.6 U	
trans-1,3-Dichloropropene	ug/kg	5.2 U	7.8 U	5.6 U	
Ethyl Benzene	ug/kg	5.2 U	7.8 U	5.6 U	
2-Hexanone	ug/kg	10 U	16 U	11 U	
Isopropylbenzene	ug/kg	5.2 U	7.8 U	5.6 U	
Methyl Acetate	ug/kg	5.2 U	7.8 U	5.6 U	
Methyl tert-butyl ether	ug/kg	5.2 U	7.8 U	5.6 U	
Methylcyclohexane	ug/kg	5.2 U	7.8 U	5.6 U	
Methylene Chloride	ug/kg	5.2 U	7.8 U	5.6 U	
4-Methyl-2-Pentanone	ug/kg	10 U	16 U	11 U	
Styrene	ug/kg	5.2 U	7.8 U	5.6 U	
1,1,2,2-Tetrachloroethane	ug/kg	5.2 U	7.8 U	5.6 U	
Tetrachloroethene	ug/kg	5.2 U	7.8 U	5.6 U	
Toluene	ug/kg	5.2 U	7.8 U	5.6 U	
1,2,3-Trichlorobenzene	ug/kg	5.2 U	7.8 UJ	5.6 U	
1,2,4-Trichlorobenzene	ug/kg	5.2 U	7.8 UJ	5.6 U	
1,1,1-Trichloroethane	ug/kg	5.2 U	7.8 U	5.6 U	
1,1,2-Trichloroethane	ug/kg	5.2 U	7.8 U	5.6 U	

Analysis/ Analyte	Units	1-__	2-__	3-__	101-__
Trichloroethene	ug/kg	5.2 U	7.8 U	5.6 U	
Trichlorofluoromethane	ug/kg	5.2 U	7.8 U	5.6 U	
1,1,2-Trichlorotrifluoroethane	ug/kg	5.2 U	7.8 U	5.6 U	
Vinyl Chloride	ug/kg	5.2 U	7.8 U	5.6 U	
m and/or p-Xylene	ug/kg	5.2 U	7.8 U	5.6 U	
o-Xylene	ug/kg	5.2 U	7.8 U	5.6 U	
1 VOCs in Water by GC/MS for Low Detection Limits					
Acetone	ug/L				5.0 U
Benzene	ug/L				0.50 UJ
Bromochloromethane	ug/L				0.50 U
Bromodichloromethane	ug/L				0.50 U
Bromoform	ug/L				0.50 U
Bromomethane	ug/L				0.50 U
2-Butanone	ug/L				5.0 U
Carbon Disulfide	ug/L				0.50 U
Carbon Tetrachloride	ug/L				0.50 U
Chlorobenzene	ug/L				1.1
Chloroethane	ug/L				0.50 U
Chloroform	ug/L				0.50 U
Chloromethane	ug/L				0.50 U
Cyclohexane	ug/L				0.50 U
1,2-Dibromo-3-Chloropropane	ug/L				0.50 U
Dibromochloromethane	ug/L				0.50 U
1,2-Dibromoethane	ug/L				0.50 U
1,2-Dichlorobenzene	ug/L				0.50 U
1,3-Dichlorobenzene	ug/L				0.50 U
1,4-Dichlorobenzene	ug/L				0.50 U
Dichlorodifluoromethane	ug/L				0.50 U
1,1-Dichloroethane	ug/L				0.50 U
1,2-Dichloroethane	ug/L				0.50 U
1,1-Dichloroethene	ug/L				20 J
cis-1,2-Dichloroethene	ug/L				31 J
trans-1,2-Dichloroethene	ug/L				1.7 J
1,2-Dichloropropane	ug/L				0.50 U
cis-1,3-Dichloropropene	ug/L				0.50 U
trans-1,3-Dichloropropene	ug/L				0.50 U
Ethyl Benzene	ug/L				0.50 U
2-Hexanone	ug/L				5.0 U
Isopropylbenzene	ug/L				0.50 U
Methyl Acetate	ug/L				0.50 U
Methyl tert-butyl ether	ug/L				0.50 U
Methylcyclohexane	ug/L				0.50 U
Methylene Chloride	ug/L				0.50 U
4-Methyl-2-Pentanone	ug/L				5.0 U
Styrene	ug/L				0.50 U

Analysis/ Analyte	Units	1-__	2-__	3-__	101-__
1,1,2,2-Tetrachloroethane	ug/L				0.50 U
Tetrachloroethene	ug/L				0.50 U
Toluene	ug/L				0.50 UJ
1,2,3-Trichlorobenzene	ug/L				0.50 U
1,2,4-Trichlorobenzene	ug/L				0.50 U
1,1,1-Trichloroethane	ug/L				0.50 U
1,1,2-Trichloroethane	ug/L				0.50 U
Trichloroethene	ug/L				3.4
Trichlorofluoromethane	ug/L				0.50 U
1,1,2-Trichlorotrifluoroethane	ug/L				0.50 U
Vinyl Chloride	ug/L				0.50 U
m and/or p-Xylene	ug/L				0.50 U
o-Xylene	ug/L				0.50 U

Analysis/ Analyte	Units	102-__	103-__	104-__	105-__
1 VOCs in Water by GC/MS for Low Detection Limits					
Acetone	ug/L	5.0 U	5.0 UJ	5.0 U	5.0 UJ
Benzene	ug/L	0.50 U	0.50 UJ	0.50 U	0.50 UJ
Bromochloromethane	ug/L	0.50 U	0.50 UJ	0.50 U	0.50 UJ
Bromodichloromethane	ug/L	0.50 U	0.50 UJ	0.50 U	0.50 UJ
Bromoform	ug/L	0.50 U	0.50 UJ	0.50 U	0.50 UJ
Bromomethane	ug/L	0.50 U	0.50 UJ	0.50 U	0.50 UJ
2-Butanone	ug/L	5.0 U	5.0 UJ	5.0 U	5.0 UJ
Carbon Disulfide	ug/L	0.50 U	0.50 UJ	0.50 U	0.50 UJ
Carbon Tetrachloride	ug/L	0.50 U	0.50 UJ	0.50 U	0.50 UJ
Chlorobenzene	ug/L	0.50 U	0.50 UJ	0.50 U	0.50 UJ
Chloroethane	ug/L	0.50 U	0.50 UJ	0.50 U	0.50 UJ
Chloroform	ug/L	0.50 U	0.50 UJ	0.50 U	0.50 UJ
Chloromethane	ug/L	0.50 U	0.50 UJ	0.50 U	0.50 UJ
Cyclohexane	ug/L	0.50 U	0.50 UJ	0.50 U	0.50 UJ
1,2-Dibromo-3-Chloropropane	ug/L	0.50 U	0.50 UJ	0.50 U	0.50 UJ
Dibromochloromethane	ug/L	0.50 U	0.50 UJ	0.50 U	0.50 UJ
1,2-Dibromoethane	ug/L	0.50 U	0.50 UJ	0.50 U	0.50 UJ
1,2-Dichlorobenzene	ug/L	0.50 U	0.50 UJ	0.50 U	0.50 UJ
1,3-Dichlorobenzene	ug/L	0.50 U	0.50 UJ	0.50 U	0.50 UJ
1,4-Dichlorobenzene	ug/L	0.50 U	0.50 UJ	0.50 U	0.50 UJ
Dichlorodifluoromethane	ug/L	0.50 U	0.50 UJ	0.50 U	0.50 UJ
1,1-Dichloroethane	ug/L	0.50 U	0.50 UJ	0.50 U	0.50 UJ
1,2-Dichloroethane	ug/L	0.50 U	0.50 UJ	0.50 U	0.50 UJ
1,1-Dichloroethene	ug/L	11 J	2.9 J	8.0	42 J
cis-1,2-Dichloroethene	ug/L	7.2 J	3.6 J	12	27 J
trans-1,2-Dichloroethene	ug/L	0.51 J	0.50 UJ	0.92	0.88 J
1,2-Dichloropropane	ug/L	0.50 U	0.50 UJ	0.50 U	0.50 UJ
cis-1,3-Dichloropropene	ug/L	0.50 U	0.50 UJ	0.50 U	0.50 U
trans-1,3-Dichloropropene	ug/L	0.50 U	0.50 UJ	0.50 U	0.50 UJ
Ethyl Benzene	ug/L	0.50 U	0.50 UJ	0.50 U	0.50 UJ
2-Hexanone	ug/L	5.0 U	5.0 UJ	5.0 U	5.0 UJ
Isopropylbenzene	ug/L	0.50 U	0.50 UJ	0.50 U	0.50 UJ
Methyl Acetate	ug/L	0.50 U	0.50 UJ	0.50 U	0.50 UJ
Methyl tert-butyl ether	ug/L	0.50 U	0.50 UJ	0.50 U	0.50 UJ
Methylcyclohexane	ug/L	0.50 U	0.50 UJ	0.50 U	0.50 UJ
Methylene Chloride	ug/L	0.50 U	0.50 UJ	0.50 U	0.50 UJ
4-Methyl-2-Pentanone	ug/L	5.0 U	5.0 UJ	5.0 U	5.0 UJ
Styrene	ug/L	0.50 U	0.50 UJ	0.50 U	0.50 UJ
1,1,2,2-Tetrachloroethane	ug/L	0.50 U	0.50 UJ	0.50 U	0.50 UJ
Tetrachloroethene	ug/L	0.50 U	0.50 UJ	0.50 U	0.50 UJ
Toluene	ug/L	0.50 U	0.50 UJ	0.50 U	0.50 UJ
1,2,3-Trichlorobenzene	ug/L	0.50 U	0.50 UJ	0.50 U	0.50 UJ
1,2,4-Trichlorobenzene	ug/L	0.50 U	0.50 UJ	0.50 U	0.50 UJ
1,1,1-Trichloroethane	ug/L	0.50 U	0.50 UJ	0.50 U	0.50 UJ
1,1,2-Trichloroethane	ug/L	0.50 U	0.50 UJ	0.50 U	0.50 UJ

Analysis/ Analyte	Units	102-__	103-__	104-__	105-__
Trichloroethene	ug/L	1.5	0.50 UJ	3.4	1.1 J
Trichlorofluoromethane	ug/L	0.50 U	0.50 UJ	0.50 U	0.50 UJ
1,1,2-Trichlorotrifluoroethane	ug/L	0.50 U	0.50 UJ	0.50 U	0.50 UJ
Vinyl Chloride	ug/L	0.50 U	0.50 UJ	0.50 U	0.85 J
m and/or p-Xylene	ug/L	0.50 U	0.50 UJ	0.50 U	0.50 UJ
o-Xylene	ug/L	0.50 U	0.50 UJ	0.50 U	0.50 UJ

Analysis/ Analyte	Units	106-__	107-__	108-__	109-__
1 VOCs in Water by GC/MS for Low Detection Limits					
Acetone	ug/L	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ
Benzene	ug/L	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
Bromochloromethane	ug/L	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
Bromodichloromethane	ug/L	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
Bromoform	ug/L	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
Bromomethane	ug/L	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
2-Butanone	ug/L	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ
Carbon Disulfide	ug/L	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
Carbon Tetrachloride	ug/L	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
Chlorobenzene	ug/L	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
Chloroethane	ug/L	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
Chloroform	ug/L	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
Chloromethane	ug/L	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
Cyclohexane	ug/L	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
1,2-Dibromo-3-Chloropropane	ug/L	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
Dibromochloromethane	ug/L	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
1,2-Dibromoethane	ug/L	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
1,2-Dichlorobenzene	ug/L	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
1,3-Dichlorobenzene	ug/L	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
1,4-Dichlorobenzene	ug/L	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
Dichlorodifluoromethane	ug/L	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
1,1-Dichloroethane	ug/L	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
1,2-Dichloroethane	ug/L	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
1,1-Dichloroethene	ug/L	11 J	2.6 J	18 J	19 J
cis-1,2-Dichloroethene	ug/L	4.1 J	6.6 J	23 J	19 J
trans-1,2-Dichloroethene	ug/L	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
1,2-Dichloropropane	ug/L	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
cis-1,3-Dichloropropene	ug/L	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
trans-1,3-Dichloropropene	ug/L	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
Ethyl Benzene	ug/L	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
2-Hexanone	ug/L	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ
Isopropylbenzene	ug/L	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
Methyl Acetate	ug/L	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
Methyl tert-butyl ether	ug/L	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
Methylcyclohexane	ug/L	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
Methylene Chloride	ug/L	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
4-Methyl-2-Pentanone	ug/L	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ
Styrene	ug/L	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
1,1,2,2-Tetrachloroethane	ug/L	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
Tetrachloroethene	ug/L	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
Toluene	ug/L	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
1,2,3-Trichlorobenzene	ug/L	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
1,2,4-Trichlorobenzene	ug/L	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
1,1,1-Trichloroethane	ug/L	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
1,1,2-Trichloroethane	ug/L	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ

Analysis/ Analyte	Units	106-__	107-__	108-__	109-__
Trichloroethene	ug/L	0.95 J	0.51 J	0.59 J	0.50 UJ
Trichlorofluoromethane	ug/L	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
1,1,2-Trichlorotrifluoroethane	ug/L	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
Vinyl Chloride	ug/L	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
m and/or p-Xylene	ug/L	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
o-Xylene	ug/L	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ

Analysis/ Analyte	Units	110-__	111-__	112-__	113-__
1 VOCs in Water by GC/MS for Low Detection Limits					
Acetone	ug/L	5.0 U	5.0 UJ	10 J	5.0 U
Benzene	ug/L	0.50 U	0.50 UJ	0.50 UJ	0.50 U
Bromochloromethane	ug/L	0.50 U	0.50 UJ	0.50 UJ	0.50 U
Bromodichloromethane	ug/L	0.50 U	0.50 UJ	0.50 UJ	0.50 U
Bromoform	ug/L	0.50 U	0.50 UJ	0.50 UJ	0.50 U
Bromomethane	ug/L	0.50 U	0.50 UJ	0.50 UJ	0.50 U
2-Butanone	ug/L	5.0 U	5.0 UJ	5.0 UJ	5.0 U
Carbon Disulfide	ug/L	0.50 U	0.50 UJ	0.50 UJ	0.50 U
Carbon Tetrachloride	ug/L	0.50 U	0.50 UJ	0.50 UJ	0.50 U
Chlorobenzene	ug/L	0.50 U	0.50 UJ	0.50 UJ	0.50 U
Chloroethane	ug/L	0.50 U	0.50 UJ	0.50 UJ	0.50 U
Chloroform	ug/L	0.50 U	0.50 UJ	0.50 UJ	0.50 U
Chloromethane	ug/L	0.50 U	0.50 UJ	0.50 UJ	0.50 U
Cyclohexane	ug/L	0.50 U	0.50 UJ	0.50 UJ	0.50 U
1,2-Dibromo-3-Chloropropane	ug/L	0.50 U	0.50 UJ	0.50 UJ	0.50 U
Dibromochloromethane	ug/L	0.50 U	0.50 UJ	0.50 UJ	0.50 U
1,2-Dibromoethane	ug/L	0.50 U	0.50 UJ	0.50 UJ	0.50 U
1,2-Dichlorobenzene	ug/L	0.50 U	0.50 UJ	0.50 UJ	0.50 U
1,3-Dichlorobenzene	ug/L	0.50 U	0.50 UJ	0.50 UJ	0.50 U
1,4-Dichlorobenzene	ug/L	0.50 U	0.50 UJ	0.50 UJ	0.50 U
Dichlorodifluoromethane	ug/L	0.50 U	0.50 UJ	0.50 UJ	0.50 U
1,1-Dichloroethane	ug/L	0.50 U	0.50 UJ	0.50 UJ	0.50 U
1,2-Dichloroethane	ug/L	0.50 U	0.50 UJ	0.50 UJ	0.50 U
1,1-Dichloroethene	ug/L	8.0	27	11 J	3.8
cis-1,2-Dichloroethene	ug/L	4.5	6.9 J	2.6 J	2.9
trans-1,2-Dichloroethene	ug/L	0.50 U	0.50 UJ	0.50 UJ	0.50 U
1,2-Dichloropropane	ug/L	0.50 U	0.50 UJ	0.50 UJ	0.50 U
cis-1,3-Dichloropropene	ug/L	0.50 U	0.50 UJ	0.50 UJ	0.50 U
trans-1,3-Dichloropropene	ug/L	0.50 U	0.50 UJ	0.50 UJ	0.50 U
Ethyl Benzene	ug/L	0.50 U	0.50 UJ	0.50 UJ	0.50 U
2-Hexanone	ug/L	5.0 U	5.0 UJ	5.0 UJ	5.0 U
Isopropylbenzene	ug/L	0.50 U	0.50 UJ	0.50 UJ	0.50 U
Methyl Acetate	ug/L	0.50 U	0.50 UJ	0.50 UJ	0.50 U
Methyl tert-butyl ether	ug/L	0.50 U	0.50 UJ	0.50 UJ	0.50 U
Methylcyclohexane	ug/L	0.50 U	0.50 UJ	0.50 UJ	0.50 U
Methylene Chloride	ug/L	0.50 U	0.50 UJ	0.50 UJ	0.50 U
4-Methyl-2-Pentanone	ug/L	5.0 U	5.0 UJ	5.0 UJ	5.0 U
Styrene	ug/L	0.50 U	0.50 UJ	0.50 UJ	0.50 U
1,1,2,2-Tetrachloroethane	ug/L	0.50 U	0.50 UJ	0.50 UJ	0.50 U
Tetrachloroethene	ug/L	0.50 U	0.50 UJ	0.50 UJ	0.50 U
Toluene	ug/L	0.50 U	0.50 UJ	0.52 J	0.50 U
1,2,3-Trichlorobenzene	ug/L	0.50 U	0.50 UJ	0.50 UJ	0.50 U
1,2,4-Trichlorobenzene	ug/L	0.50 U	0.50 UJ	0.50 UJ	0.50 U
1,1,1-Trichloroethane	ug/L	0.50 U	0.50 UJ	0.50 UJ	0.50 U
1,1,2-Trichloroethane	ug/L	0.50 U	0.50 UJ	0.50 UJ	0.50 U

Analysis/ Analyte	Units	110-__	111-__	112-__	113-__
Trichloroethene	ug/L	0.79	0.50 UJ	0.50 UJ	0.85
Trichlorofluoromethane	ug/L	0.50 U	0.50 UJ	0.50 UJ	0.50 U
1,1,2-Trichlorotrifluoroethane	ug/L	0.50 U	0.50 UJ	0.50 UJ	0.50 U
Vinyl Chloride	ug/L	0.50 U	0.58 J	0.50 UJ	0.50 U
m and/or p-Xylene	ug/L	0.50 U	0.50 UJ	0.50 UJ	0.50 U
o-Xylene	ug/L	0.50 U	0.50 UJ	0.50 UJ	0.50 U

Analysis/ Analyte	Units	114-__	115-__	116-__	117-__
1 VOCs in Water by GC/MS for Low Detection Limits					
Acetone	ug/L	5.0 U	5.0 U	5.0 U	5.0 UJ
Benzene	ug/L	0.50 U	0.50 U	0.50 U	0.50 UJ
Bromochloromethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 UJ
Bromodichloromethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 UJ
Bromoform	ug/L	0.50 U	0.50 U	0.50 U	0.50 UJ
Bromomethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 UJ
2-Butanone	ug/L	5.0 U	5.0 U	5.0 U	5.0 UJ
Carbon Disulfide	ug/L	0.50 U	0.50 U	1.0	0.50 UJ
Carbon Tetrachloride	ug/L	0.50 U	0.50 U	0.50 U	0.50 UJ
Chlorobenzene	ug/L	0.50 U	0.50 U	0.50 U	0.50 UJ
Chloroethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 UJ
Chloroform	ug/L	0.50 U	0.50 U	0.50 U	0.50 UJ
Chloromethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 UJ
Cyclohexane	ug/L	0.50 U	0.50 U	0.50 U	0.50 UJ
1,2-Dibromo-3-Chloropropane	ug/L	0.50 U	0.50 U	0.50 U	0.50 UJ
Dibromochloromethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 UJ
1,2-Dibromoethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 UJ
1,2-Dichlorobenzene	ug/L	0.50 U	0.50 U	0.50 U	0.50 UJ
1,3-Dichlorobenzene	ug/L	0.50 U	0.50 U	0.50 U	0.50 UJ
1,4-Dichlorobenzene	ug/L	0.50 U	0.50 U	0.50 U	0.50 UJ
Dichlorodifluoromethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 UJ
1,1-Dichloroethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 UJ
1,2-Dichloroethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 UJ
1,1-Dichloroethene	ug/L	4.6	2.4	18 J	5.3 J
cis-1,2-Dichloroethene	ug/L	2.0	1.1	1.5 J	1.6 J
trans-1,2-Dichloroethene	ug/L	0.50 U	0.50 U	0.50 U	0.50 UJ
1,2-Dichloropropane	ug/L	0.50 U	0.50 U	0.50 U	0.50 UJ
cis-1,3-Dichloropropene	ug/L	0.50 U	0.50 U	0.50 U	0.50 UJ
trans-1,3-Dichloropropene	ug/L	0.50 U	0.50 U	0.50 U	0.50 UJ
Ethyl Benzene	ug/L	0.50 U	0.50 U	0.50 U	0.50 UJ
2-Hexanone	ug/L	5.0 U	5.0 U	5.0 U	5.0 UJ
Isopropylbenzene	ug/L	0.50 U	0.50 U	0.50 U	0.50 UJ
Methyl Acetate	ug/L	0.50 U	0.50 U	0.50 U	0.50 UJ
Methyl tert-butyl ether	ug/L	0.50 U	0.50 U	0.50 U	0.50 UJ
Methylcyclohexane	ug/L	0.50 U	0.50 U	0.50 U	0.50 UJ
Methylene Chloride	ug/L	0.50 U	0.50 U	0.50 U	0.50 UJ
4-Methyl-2-Pentanone	ug/L	5.0 U	5.0 U	5.0 U	5.0 UJ
Styrene	ug/L	0.50 U	0.50 U	0.50 U	0.50 UJ
1,1,2,2-Tetrachloroethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 UJ
Tetrachloroethene	ug/L	0.50 U	0.50 U	0.50 U	0.50 UJ
Toluene	ug/L	0.50 U	0.51	0.50 U	0.50 UJ
1,2,3-Trichlorobenzene	ug/L	0.50 U	0.50 U	0.50 U	0.50 UJ
1,2,4-Trichlorobenzene	ug/L	0.50 U	0.50 U	0.50 U	0.50 UJ
1,1,1-Trichloroethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 UJ
1,1,2-Trichloroethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 UJ

Analysis/ Analyte	Units	114-__	115-__	116-__	117-__
Trichloroethene	ug/L	0.50 U	0.50 U	0.50 U	0.61 J
Trichlorofluoromethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 UJ
1,1,2-Trichlorotrifluoroethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 UJ
Vinyl Chloride	ug/L	0.50 U	0.50 U	1.0	0.50 UJ
m and/or p-Xylene	ug/L	0.50 U	0.50 U	0.50 U	0.50 UJ
o-Xylene	ug/L	0.50 U	0.50 U	0.50 U	0.50 UJ

Analysis/ Analyte	Units	118-__	119-__	120-__	121-__
1 VOCs in Water by GC/MS for Low Detection Limits					
Acetone	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Benzene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Bromochloromethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Bromodichloromethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Bromoform	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Bromomethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 UJ
2-Butanone	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Carbon Disulfide	ug/L	0.63	0.50 U	0.53	0.50 U
Carbon Tetrachloride	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Chlorobenzene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Chloroethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Chloroform	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Chloromethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Cyclohexane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dibromo-3-Chloropropane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Dibromochloromethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dibromoethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dichlorobenzene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
1,3-Dichlorobenzene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
1,4-Dichlorobenzene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Dichlorodifluoromethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
1,1-Dichloroethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dichloroethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
1,1-Dichloroethene	ug/L	3.3	48	34	5.5
cis-1,2-Dichloroethene	ug/L	0.50 U	2.6 J	6.5 J	0.59
trans-1,2-Dichloroethene	ug/L	0.50 U	0.50 U	0.58 J	0.50 U
1,2-Dichloropropane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
cis-1,3-Dichloropropene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
trans-1,3-Dichloropropene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Ethyl Benzene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Isopropylbenzene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Methyl Acetate	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Methyl tert-butyl ether	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Methylcyclohexane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Methylene Chloride	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
4-Methyl-2-Pentanone	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
1,1,2,2-Tetrachloroethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Tetrachloroethene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Toluene	ug/L	0.50 U	0.50 U	0.51	0.50 U
1,2,3-Trichlorobenzene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
1,1,1-Trichloroethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
1,1,2-Trichloroethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U

Analysis/ Analyte	Units	118-__	119-__	120-__	121-__
Trichloroethene	ug/L	0.50 U	0.50 U	0.79	0.50 U
Trichlorofluoromethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
1,1,2-Trichlorotrifluoroethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl Chloride	ug/L	0.50 U	1.5	1.4	0.50 U
m and/or p-Xylene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
o-Xylene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U

Analysis/ Analyte	Units	122-__	123-FB	124-__	125-__
1 VOCs in Water by GC/MS for Low Detection Limits					
Acetone	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Benzene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Bromochloromethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Bromodichloromethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Bromoform	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Bromomethane	ug/L	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
2-Butanone	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Carbon Disulfide	ug/L	0.89	1.1	0.71	0.50 U
Carbon Tetrachloride	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Chlorobenzene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Chloroethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Chloroform	ug/L	2.9	3.4	0.50 U	0.50 U
Chloromethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Cyclohexane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dibromo-3-Chloropropane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Dibromochloromethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dibromoethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dichlorobenzene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
1,3-Dichlorobenzene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
1,4-Dichlorobenzene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Dichlorodifluoromethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
1,1-Dichloroethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dichloroethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
1,1-Dichloroethene	ug/L	0.50 UJ	0.50 U	7.1	90
cis-1,2-Dichloroethene	ug/L	0.50 UJ	0.50 U	0.50 U	0.50 U
trans-1,2-Dichloroethene	ug/L	0.50 UJ	0.50 U	0.50 U	0.50 U
1,2-Dichloropropane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
cis-1,3-Dichloropropene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
trans-1,3-Dichloropropene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Ethyl Benzene	ug/L	0.50 U	0.50 U	0.50 U	0.62
2-Hexanone	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Isopropylbenzene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Methyl Acetate	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Methyl tert-butyl ether	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Methylcyclohexane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Methylene Chloride	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
4-Methyl-2-Pentanone	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
1,1,2,2-Tetrachloroethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Tetrachloroethene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Toluene	ug/L	0.50 U	0.50 U	0.50 U	0.60
1,2,3-Trichlorobenzene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
1,1,1-Trichloroethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
1,1,2-Trichloroethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U

Analysis/ Analyte	Units	122-__	123-FB	124-__	125-__
Trichloroethene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Trichlorofluoromethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
1,1,2-Trichlorotrifluoroethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl Chloride	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
m and/or p-Xylene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
o-Xylene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U

Analysis/ Analyte	Units	126-__	127-__	128-__	129-__
1 VOCs in Water by GC/MS for Low Detection Limits					
Acetone	ug/L	5.9	5.0 U	5.0 U	11
Benzene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Bromochloromethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Bromodichloromethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Bromoform	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Bromomethane	ug/L	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
2-Butanone	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Carbon Disulfide	ug/L	0.94	0.50 U	0.50 U	0.91
Carbon Tetrachloride	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Chlorobenzene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Chloroethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Chloroform	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Chloromethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Cyclohexane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dibromo-3-Chloropropane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Dibromochloromethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dibromoethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dichlorobenzene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
1,3-Dichlorobenzene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
1,4-Dichlorobenzene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Dichlorodifluoromethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
1,1-Dichloroethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dichloroethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
1,1-Dichloroethene	ug/L	25	45	32	3.3
cis-1,2-Dichloroethene	ug/L	0.50 U	1.3 J	2.9 J	0.50 U
trans-1,2-Dichloroethene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dichloropropane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
cis-1,3-Dichloropropene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
trans-1,3-Dichloropropene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Ethyl Benzene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Isopropylbenzene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Methyl Acetate	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Methyl tert-butyl ether	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Methylcyclohexane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Methylene Chloride	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
4-Methyl-2-Pentanone	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
1,1,2,2-Tetrachloroethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Tetrachloroethene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Toluene	ug/L	0.50 U	0.50 U	0.50 U	0.55
1,2,3-Trichlorobenzene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
1,1,1-Trichloroethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
1,1,2-Trichloroethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U

Analysis/ Analyte	Units	126-__	127-__	128-__	129-__
Trichloroethene	ug/L	0.50 U	0.50 U	3.2	0.50 U
Trichlorofluoromethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
1,1,2-Trichlorotrifluoroethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl Chloride	ug/L	0.50 U	1.5	0.73	0.50 U
m and/or p-Xylene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
o-Xylene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U

Analysis/ Analyte	Units	130-__	131-__	132-__	133-FB
1 VOCs in Water by GC/MS for Low Detection Limits					
Acetone	ug/L	5.0 U	6.1	5.8	5.0 U
Benzene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Bromochloromethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Bromodichloromethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Bromoform	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Bromomethane	ug/L	0.50 U	0.50 UJ	0.50 UJ	0.50 UJ
2-Butanone	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Carbon Disulfide	ug/L	1.3	1.6	0.83	0.50 U
Carbon Tetrachloride	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Chlorobenzene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Chloroethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Chloroform	ug/L	0.50 U	0.50 U	0.50 U	0.61
Chloromethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Cyclohexane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dibromo-3-Chloropropane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Dibromochloromethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dibromoethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dichlorobenzene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
1,3-Dichlorobenzene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
1,4-Dichlorobenzene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Dichlorodifluoromethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
1,1-Dichloroethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dichloroethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
1,1-Dichloroethene	ug/L	1.4	1.8	1.1	0.50 U
cis-1,2-Dichloroethene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
trans-1,2-Dichloroethene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dichloropropane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
cis-1,3-Dichloropropene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
trans-1,3-Dichloropropene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Ethyl Benzene	ug/L	0.50 U	1.1	0.50 U	0.50 U
2-Hexanone	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Isopropylbenzene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Methyl Acetate	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Methyl tert-butyl ether	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Methylcyclohexane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Methylene Chloride	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
4-Methyl-2-Pentanone	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
1,1,2,2-Tetrachloroethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Tetrachloroethene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Toluene	ug/L	0.50 U	0.97	0.50 U	0.50 U
1,2,3-Trichlorobenzene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
1,1,1-Trichloroethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
1,1,2-Trichloroethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U

Analysis/ Analyte	Units	130-__	131-__	132-__	133-FB
Trichloroethene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Trichlorofluoromethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
1,1,2-Trichlorotrifluoroethane	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl Chloride	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
m and/or p-Xylene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U
o-Xylene	ug/L	0.50 U	0.50 U	0.50 U	0.50 U

Screening Level GC/MS Results for: Allied Systems & 26th and Bayard

Analyst: Lorenzo Sena

Quantitation range without dilution: 3.5ug/M3 to 1500 ug/M3

Manufacturer:	Absolute Standards	**Manufacturer:**	Ultra	**Manufacturer:**	SUPELCO
Stock Standard Lot Number:	91014	**Internal Standard Lot Number:**	CL-3198	**BFB Lot Number:**	xa13038v
Stock Standard Expiration Date:	9/10/2017	**Internal Standard Expiration Date:**	9/30/2017	**BFB Expiration Date:**	3/1/2018
Stock Standard Part Number:	98170	**Internal Standard Part Number:**	STM 272-1	**BFB Part Number:**	47077
Prep Date:	8/9/2017	**Prep Date:**	8/9/2017	**Prep Date:**	6/20/2017

*All Concentrations are in: ug/M3

Sample Number	Matrix	Sample Type	Date of Analysis	Time of Analy	trans 1,2 -DCE	cis 1,2-DCE	TCE	PCE	Comments
3.5 ug/M3	Air	Cal Standard	**8/9/2017**	9:08	**3.34**	**2.91**	**3.15**	**3.49**	
10 ug/M3	Air	Cal Standard	**8/9/2017**	9:25	8.95	9.08	9.80	9.51	
50 ug/M3	Air	Cal Standard	**8/9/2017**	10:05	46.34	46.55	50.62	52.61	
100 ug/M3	Air	Cal Standard	**8/9/2017**	10:43	91.75	93.60	98.58	102.59	
500 ug/M3	Air	Cal Standard	**8/9/2017**	11:05	505.86	509.07	503.87	505.96	
1000 ug/M3	Air	Cal Standard	**8/9/2017**	12:06	996.91	992.27	996.04	991.87	
1500 ug/M3	Air	Cal Standard	**8/9/2017**	12:22	1500.81	1502.88	1501.47	1503.30	
B-2	Air	Grab	**8/9/2017**	12:38	3.5U	3.5U	3.5U	16.23	various alkanes present in sample
B-5	Air	Grab	**8/9/2017**	13:46	3.5U	3.5U	3.5U	4.42	
B-6	Air	Grab	**8/9/2017**	14:34	3.5U	3.5U	3.5U	3.5U	
B-8	Air	Grab	**8/9/2017**	12:54	3.5U	3.5U	3.5U	3.83	
SG-13	Air	Grab	**8/9/2017**	14:02	3.5U	3.5U	3.5U	13.01	
SG-13LD	Air	Grab	**8/9/2017**	15:02	3.5U	3.5U	3.5U	11.59	
SG-2	Air	Grab	**8/9/2017**	13:26	3.5U	3.5U	3.5U	3.5U	
SG-7	Air	Grab	**8/9/2017**	14:18	3.5U	3.5U	3.5U	11.61	
SG-9	Air	Grab	**8/9/2017**	13:10	3.5U	3.5U	3.5U	36.05	
3.5UGM3 CAL CHECK	Air	Grab	**8/9/2017**	15:18	2.69	2.68	3.53	4.19	
50 UG/M3 CAL CHECK	Air	Grab	**8/9/2017**	15:34	46.81	46.82	47.36	50.75	
3.5 ug/M3	Air	Grab	**8/10/2017**	7:18	3.00	2.79	2.73	3.09	
500 ug/M3	Air	Grab	**8/10/2017**	7:34	465.02	467.00	462.64	446.97	
1500 ug/M3	Air	Grab	**8/10/2017**	7:55	1460.84	1448.11	1340.51	1288.13	
SG-1	Air	Grab	**8/10/2017**	8:47	3.5U	3.5U	3.5U	3.5U	
SG-10	Air	Grab	**8/10/2017**	9:05	3.5U	3.5U	3.5U	3.5U	
SG-11	Air	Grab	**8/10/2017**	8:31	3.5U	3.5U	3.5U	3.5U	
SG-6 AT 5 FEET	Air	Grab	**8/10/2017**	8:11	3.5U	3.5U	3.5U	3.73	
SG-8	Air	Grab	**8/10/2017**	9:22	3.5U	3.5U	3.5U	16.54	
SG-5 AT 6FEET	Air	Grab	**8/10/2017**	9:38	3.5U	3.5U	3.5U	8.92	
SG-4	Air	Grab	**8/10/2017**	9:57	3.5U	3.5U	3.5U	3.5U	
SG-12	Air	Grab	**8/10/2017**	10:13	3.5U	3.5U	3.5U	3.5U	
SG-3	Air	Grab	**8/10/2017**	10:29	3.5U	3.5U	3.5U	20.11	
B-1	Air	Grab	**8/10/2017**	10:44	3.5U	3.5U	3.5U	3.5U	
B-10	Air	Grab	**8/10/2017**	11:34	3.5U	3.5U	4626.59*	4.05	
B-4	Air	Grab	**8/10/2017**	13:42	3.5U	3.5U	3.5U	3.5U	
B-7	Air	Grab	**8/10/2017**	12:51	3.5U	3.5U	3.5U	3.5U	
B-9	Air	Grab	**8/10/2017**	11:02	3.5U	3.5U	3.5U	3.5U	
SG-8LD	Air	Grab	**8/10/2017**	15:29	3.5U	3.5U	3.5U	16.31	
3.5 ug/M3 CAL CHECK	Air	Cal Standard	**8/10/2017**	15:53	2.60	3.05	3.24	3.74	
500 ug/M3 CAL CHECK	Air	Cal Standard	**8/10/2017**	16:14	452.95	459.68	461.25	462.70	
1500 ug/M3 CAL CHECK	Air	Cal Standard	**8/10/2017**	16:30	1407.89	1386.88	1377.78	1391.97	